



Programme: MSc Property and Facilities Management

Module: Health and Safety Management

Module Code: M7X01806

Lecturer: Dr Juan Ferriz-Papi

Assignment Title: Case study Audit – Architectural
Laboratory Room 024

Submission Date: 10th January 2019

Completed by: Richard Black

Student I.D. 1803287

Table of Contents

1.0	Introduction	3
2.0	Methodology	4
3.0	Description of Space	7
3.1	Activities	7
3.2	Location	7
3.3	Equipment	7
3.4	Substances	8
4.0	Key Findings Of Risk Assessment.....	8
5.0	Conclusion	8
6.0	References & Bibliography	9
Appendix 1 – Risk Assessment Architect Laboratory Rm 024		11
Appendix 2 – COSHH Assessment Architect Laboratory Rm 024		12
Appendix 3 – Safety data and Technical data Sheets.....		13
Appendix 4 – Floor plan photo locations illustrating potential hazards		14
Appendix 5 – Photos.....		15
Photo 1 – Architect Laboratory Room 024		15
Photo 2 – Architect Laboratory Room layout.....		16
Photo 3 – Architect Laboratory Room layout.....		17
Photo 4 – Architect Laboratory Room showing typical equipment		18
Photo 5 – Architect Laboratory Room showing typical equipment		19
Photo 6 – Architect Laboratory Room showing electrical floor power outlet		20
Photo 7 – Architect Laboratory Room showing typical equipment/materials and glass façade. 21		
Photo 8 – Architect Laboratory Room showing typical working practice and hot glue gun plugged into floor outlet.....		22
Photo 9 – Architect Laboratory Room showing typical chemical’s glues ready for use.....		23
Photo 10 – Architect Laboratory Room showing typical student working upon building design model.		24
Photo 11 – Construction Laboratory showing roller shutter door scenario between both Labs. 25		
Appendix 6 – Brief Overview of Different Approaches that can be adopted for Risk Assessments processes.....		26
Appendix 6 – H&S Advisor UWTSD Supporting Risk Assessment information IQ Building Architectural Lab.....		27

1.0 Introduction

The purpose of the assignment is to complete a case study audit to identify the “Health and Safety (H&S)” legislation that is relevant for the management of the facility and to evaluate the effectiveness of the controls that are in place to meet those requirements and safeguard the health and safety of staff and students.

The audit was performed in the Architect Laboratory (room 024) located on the ground floor of the prestigious new UWTSD SA1 campus.

The author will undertake a risk assessment, as required by regulation 3 of the management of Health and Safety at Work Regulations 1974, to identify hazards, evaluate the associated controls and make recommendations for improvements.

During this audit process consideration was, also given into the following regulatory systems currently in place in the UK.

COSHH – Control of Substances hazardous to Health Regulations 2002

PUWER - Provision and Use of Work Equipment Regulations 1998

PUWER – Safe Use of Work Equipment Regulations 1998

Health and Safety at Work Regulations 1974

Workplace Health, Safety and Welfare Regulations 1992

The regulations typically refer to the duty owed by an employer to an employee, in this case, the University to teaching staff. As students are not employees.

2.0 Methodology

A site visit was, conducted on 22nd November 2018. The photos in [Appendix 5](#) were, taken at the time of the visit and highlight some of the key hazards that, were noted in the risk assessment.

During this site visit I met with Cherie Coughlan, Health and Safety Advisor (UWTSD)

I requested the following documents but they were not available for inspection at the time of the visit: Existing Risk assessments, COSHH data, and accident or near miss records.

The aim of this process was to conduct a case study audit in the form of a generic risk assessment format that evaluated the specific activities along with potential hazards within the environment.

In order to carry this process out we would need to undertake a reasonably practicable approach to firstly evaluating the risks versus the methods required to manage them in terms of time and cost. Normally, a hierarchy of control would be, used as an integral part to the process as the evaluated risks should always be, reduced to the lowest perceivable level or equal to what is deemed reasonably practicable in order of importance.

There are a couple of different approaches that could have been, adopted for the completion of risk assessments process such as fault tree analysis and hazard and operating analysis (HAZOP). However, they were not introduced within this audit but are given consideration in form of a brief overview within [Appendix 6](#).

Employers are free to apply other approaches that manage associated risks either as part or in addition of the risk assessment process. For example, these could be Fire Risk Assessments, Approval to work permits, confined space, specific activity risk assessment, COSHH assessments and detailed method statements (RAMS), safe systems of work or dynamic risk assessments.

The approach I undertook for this particular scenario in order to achieve a suitable case study audit was to adopt the [Risk - Controlling risk in the workplace \(HSE 2018\)](#) five step principles set out below;

- Identify the Hazards
- Decide who might be harmed and how
- Evaluated the risks and decide on precautions
- Record significant findings
- Review any existing assessment and update if necessary

Using the five step principles of risk assessment for this assignment case study audit enabled a reasonably practicable type risk assessment and COSHH evaluation to be, conducted. Due to time constraints and limitations with how the architect laboratory is currently set up, being used the risk assessment, and COSHH evaluation will not detail all hazards within this case study audit. Usually it would be recommendation that separate risk assessments for each and every, task be, conducted and in place, although in reality it is not always sensible to be, bogged down with excessive risk assessment paperwork. Under most circumstance, a common sense approach will suffice in the evaluation and management of hazards in the work place.

The health and Safety executive does not require us to score risks however, the academic establishment I currently work for does require a risk score as part of its policies and procedures. In the approach I have adopted for this process, I will be using a risk matrix, which rates potential severity and likelihood on a scale of 1-5 as shown in the table below. This requires a subjective judgement being made, drawing on the assessors experience and available information.

Table 1 - RISK MATRIX: (To generate the risk level).

Very likely 5	5	10	15	20	25
Likely 4	4	8	12	16	20
Possible 3	3	6	9	12	15
Unlikely 2	2	4	6	8	10
Extremely unlikely 1	1	2	3	4	5
Likelihood (L) ↑ Severity (S)	Minor injury – No first aid treatment required 1	Minor injury – Requires First Aid Treatment 2	Injury - requires GP treatment or Hospital attendance 3	Major Injury 4	Fatality 5

ACTION LEVEL: (To identify what action needs to be taken).

POINTS:	RISK LEVEL:	ACTION:
1 – 2	NEGLIGIBLE	No further action is necessary.
3 – 5	TOLERABLE	Where possible, reduce the risk further
6 - 12	MODERATE	Additional control measures are required
15 – 16	HIGH	Immediate action is necessary
20 - 25	INTOLERABLE	Stop the activity/ do not start the activity

Further reading and research in to Risk assessment was, conducted via the HSE website under; [frequently asked questions \(HSE 2018\)](#)

There is no particular risk assessment in place that is likely to cover all evaluated risks within the workplace however, by adopting a systematic approach of the risks identified during the visit within the architect laboratory the completion of the risk assessment enable and conclude what is an acceptable level of risk.

It is however, a legal requirement under the current Health and Safety legislation where there five or more employees that all work place activities require an evaluation into whether they can potentially cause injury or ill health are adequately recorded. Every, employer has a duty of care and a legal obligation to ensure the health and safety of the work place environment under their control.

The “[Managing for Health and Safety “also known as HSG65 \(HSE 2018\)](#) explains that effective risk assessments are a cornerstone of effective health and safety management by allowing key hazards to be identified and managed.

A lack written assessments would represent a breach of the health and safety management regulations 1999. [HSG65 \(2018\)](#)

Therefore, it’s would regarded as good practice for the UWTSD to ensure so far as reasonably, practicable in association with specific activities such as those described within the completed risk assessment for the architect laboratory are continually, monitored and assessed. The Risk assessments should, be reviewed over a period of twelve months or if significant changes have occurred in relation to a hazard associated with a task such procedural change and or move to new environment with use of new equipment, tools and or chemicals.

Inevitably, some employers can inadvertently overlook the risk assessment processes for many activities by opting to complete a generic type risk assessment. Unfortunately, from experience and a reality perspective the proper to do would be to complete a robust and proper risk assessment evaluation to capture and manage the associated hazards.

The case study risk assessments and COSHH assessment completed in relation to this case study audit can be, examined further within [Appendix 1 & 2](#).

3.0 Description of Space

It can be seen from the pictures [Appendix 5](#) that the Architect Laboratory is still in the early stages of final development for its use; however, for the purpose of this case study audit we can assume it was in full operation.

The architect laboratory area is both mechanically heated and ventilated; however, no local extract ventilation (LEV) was established at the time of the survey. Entry and exit from the area is generally through the main building although other entry and exits were available such as the roller shutter to the adjacent construction laboratory and the glass façade, fire exit door that leads out into the adjacent road.

The building is relatively rectangular, in its shape and the internal areas are divided off by the use of large desks, tables and drawing boards. There were no designated walkways identified as such between the desks/tables during the survey.

For further information in relation to the Architect Laboratory please refer to [Appendix 5](#) which depicts with the use of a floor plan and numbered photos where hazards were noted.

3.1 Activities

Its current use is to support a teaching environment conducive for students studying in the field of architecture allowing them to express their creative prowess with the development and building of models that reflect their own designs. The various activities identified during the visit would not be dissimilar to comparisons seen in other educational establishments.

On being encouraged to ask relevant questions to the UWTSD H&S advisor it quickly became apparent that all the associated models, materials, equipment, tools, knives, chemical glues being used at the time are supplied by the students themselves. Although it was made clear that the teaching staff have a duty of care along with a responsibility to ensure the safe use and safety of the students whilst using the facility.

3.2 Location

Architect Laboratory (room 024) located on the ground floor of the prestigious new UWTSD SA1 campus.

It's a fairly large work workspace capable of accommodating reasonable classes of students although it's apparent the space is still going through a transition of construction and final set up. Therefore, the risk assessment would need to be reviewed following a final completion to ensure that new or altered hazards and controls have been identified.

3.3 Equipment

Computers, drawing boards, material fabrics, wood, metals and plastics, hand tools, knives, hammers, screwdrivers, battery-operated drills, chemical substances, primers, electrically powered hot glue guns, superglue and spray mount.

3.4 Substances

3M Spray Mount, Loctite Super glue and PastiKote primer depict substance identified during the visit.

Please refer to [Appendix 2 – COSHH Assessment](#) and [Appendix 3 – Safety Data and Technical data sheets](#) for further detail and clarification such as exposure limitations.

4.0 Key Findings Of Risk Assessment

The audit essentially assessed the management of the space from the perspective of the teaching activities. Initial observations identified student activities with the use of specific tools and substances, all of which prompted basis of the audit. The risk assessment lists out the potential hazards identified during the area at time of visit and the COSHH assessment complete with manufacturer safety and technical data provides details into substance identified.

Further details of these including any recommendations for controlling them are, examined further within [Appendix 1 – Risk assessment and Appendix 2 – COSHH Assessment](#).

Other risks associated with the overall management of the building, such as legionella, pressure Systems and passenger lifts as an example are assessed and managed by the H&S advisor (UWTSD) and was outside the scope of this audit. However, given observations made during the visit in relation to the current layout a specific fire risk assessment should be, performed in accordance with the requirements of the [Regulatory Reform \(Fire Safety\) Order 2005](#)

5.0 Conclusion

The Architect Laboratory teaching space is still moving through a transitional period in order to reach and settle with its final set-up. After speaking with the H&S Advisor during the audit process assurances claim the UWTSD would be aiming complete the room set up in support of the students and teachers sooner rather than later. In conducting this process, the UWTSD will be aiming to conduct full evaluation of the space in the form of a risk assessment to ensure new or altered hazards and controls have been, identified.

Overall to ensure so far as reasonably, practicable a systematic approach was, adopted for both the risk assessment and COSHH evaluation process and it was used to identified hazards, review existing control measures and establish who would be harmed and how.

By also evaluating risk assessment and COSHH, data supplied by the H&S Advisor UWTSD [Appendix 7](#) it allowed me to conduct an analysis of the existing hierarchy of control and conclude my own observations and assessment using the risk matrix, evaluation process and applying a point assessment from severity verses likelihood. These result then allowed me to form the overall risk level score that represented either an action that required further control measures or an action that required no further action at this time.

6.0 References & Bibliography

References

1. HSE (2018) Risk – Controlling the risk in the workplace. Available at <http://www.hse.gov.uk/managing/index.htm> (Accessed Online Thursday 6th December 2018)
2. HSE (2018) Frequently asked questions. Available at <http://www.hse.gov.uk/risk/faq.htm#q1> (Accessed Online Thursday 6th December 2018)
3. HSE (2018) Managing for Health and Safety also known as HSG65. Available at <http://www.hse.gov.uk/managing/index.htm> (Accessed Online Thursday 6th December 2018)
4. Home Office Publication (2006) *Regulatory Reform (Fire Safety) Order 2005*. Available At: <https://www.gov.uk/government/publications/regulatory-reform-fire-safety-order-2005-guidance-note-enforcement> (Accessed online Thursday 6th December 2018)

Bibliography

1. HSE (2018) *Workplace exposure limits EH40-2005 (3rd Ed 2018)*. Available at <http://www.hse.gov.uk/pubns/books/eh40.htm> (Accessed Online Thursday 6th December 2018)
2. HSE (2018) *Managing for Health and Safety also known as HSG65*. Available at <http://www.hse.gov.uk/pubns/books/hsg65.htm> (Accessed Online Thursday 6th December 2018)
3. 3M (2018) *3M Spray Mount data sheet*. Available at http://multimedia.3m.com/mws/mediawebserver?mwsId=SSSSSuUn_zu8IzNvM8m1M82Z5v70k17zHvu9lxtD7SSSSS-- (Accessed Online Thursday 6th December 2018)
4. Loctite (2018) *Super glue safety and data sheets*. Available at <http://www.loctiteproducts.com/techdata-sds.shtml> (Accessed Online Thursday 6th December 2018)
5. Multimedia 3M (2018) *Primer Pastikote data sheet*. Available at http://multimedia.3m.com/mws/mediawebserver?mwsId=SSSSSuUn_zu8IzNvM8m1M82Z5v70k17zHvu9lxtD7SSSSS-- (Accessed Online Thursday 6th December 2018)
6. HSE (1992) *Workplace Health, Safety and welfare regulations*. Available at: <http://www.hse.gov.uk/pubns/books/l24.htm> (Accessed Online Friday 7th December 2018)

7. HSE (1998) *Provision and use of Work Equipment regulations* (PUWER 1998)
Available at: <http://www.hse.gov.uk/work-equipment-machinery/puwer.htm> (Accessed Online Friday 7th December 2018)
8. HSE (1998) *Safe Use of Work Equipment*. Available at:
<http://www.hse.gov.uk/pUbns/priced/l22.pdf> (Accessed Online Friday 7th December 2018)

Appendix 1 – Risk Assessment Architect Laboratory Rm 024

GENERAL RISK ASSESSMENT FORM

Ref: RA_024_v1

Describe the activity being assessed: General case study Survey Architect Laboratory (024)	Assessed by: Richard Black	Endorsed by: TBC
Who might be harmed: Staff/Students How many exposed to risk: 10+	Date of Assessment: 22 nd Nov 2018	Review date(s): 21 st Nov 2019

Note: A University campus can be a dynamic environment and these are the most common hazards you might come across. If you encounter a significant, uncontrolled hazard, do not proceed with the activity (take a picture if possible & safe to do so) and report it to your line manager (Estates has a hazard register to capture and respond to ad hoc hazards).

Hazards Identified (state the potential harm)	Existing Control Measures	S	L	Risk Level	Additional Control Measures	S	L	Risk Level	By whom and by when	Date completed
Storage Wooden Pallets, Materials, Tools, Portable electric equipment, chemicals/glues, primers and spray paints	No evidence to support the implementation of any storage, secure cabinets or racking arrangements during case study audit.	4	4	16	New storage, secure cabinets and racking arrangements required. Specialist secure Yellow COSHH storage solutions. Safe systems of work to ensuring materials managed and stored correctly. Use of appropriate PPE as instructed or required.	2	2	4	UWTSD Course Leader, Estates UWTSD H&S, Course leader, staff and Lab technicians.	
Working Laboratory Environment Slips, trips and falls leading to abrasions, cuts or a fracture	- No evidence to support the safe working environment identified during the audit visit. - Staff/students are not expected to rush activity/task - Most work conducted during daylight hours	4	4	16	Inductions to all staff/student describing the environment they will be working in along with checking their H&S awareness and current understanding of any RA in place. Safety audits and workplace/activity inspections	2	2	4	UWTSD H&S, Course leader, staff and Lab technicians.	

				Non-Slip Safety footwear and appropriate PPE Designated walkways/areas Power supplies from ceiling retractable type outlets above workstations rather than floor points. Defined emergency escape routes and walkways in and around the space. Maintenance regime for lighting, Power, heating, ventilation and extract strategies. Good House Keeping and procedures in place for spillages. H&S responsibility of departments/faculties to maintain good order in the workplace Cleaning regime at UWTSD ensuring all workplace areas kept clean and any rubbish and debris removed and recycled. Containers and all types of chemical substances to be store appropriately within compliance of H&S and or Manufactures recommendations. Use of Yellow COSHH storage systems Signage whilst tasks are, being conducted.			UWTSD H&S, Course leader, staff and Lab technicians.	
--	--	--	--	--	--	--	---	--

					Ensure compliance with COSHH – Control of Substances hazardous to Health Regulations 2002 EH40/2005 Workplace exposure limits 3rd Ed. 2018 PUWER - Provision and Use of Work Equipment Regulations 1998 Health and Safety at Work Regulations 1974 Workplace Health, Safety and Welfare Regulations 1992				UWTSD H&S, Course leader, staff and Lab technicians.	
Manual Handling	No evidence to support requirements for manual handling identified during the audit visit.	4	4	16	Manual Handling training to staff/lab tech Safe system of work, avoid lifting where possible. Complete regular audits All remaining manual handling task to be RA.	2	2	4	UWTSD H&S, Course leader, staff and Lab technicians.	
Usage of Hazardous substances 3M Spray Mount, Super Glue, Primer Plastikote	No evidence at time of audit to support equipment, tools, materials and chemicals such as spray mount, primers, glues and paints being provided and controlled by UWTSD Architect department.	4	4	16	Inductions/talks to all staff/student describing the safe use of these chemicals along with checking their H&S awareness and current understanding of any RA and COSHH data in place. Safety audits and workplace/activity inspections Safe systems of work in compliance with UWTSD policies.	2	2	4	UWTSD H&S, Course leader, staff and Lab technicians.	

				Completion of regular Task audits or re-evaluation of existing. All highly flammable substances should be stored in suitably labelled, lockable metal storage bin or cupboard designed for the purpose. (LEV) Extract Ventilation control strategies. Lab induction for students by staff/lead technician prior to entry to labs or associated hazardous areas (e.g. stores) Sign in/out arrangements for use of controlled substances such as primers, spray paints and glues. Staff/Lead technicians involved in project plans for work in labs Ensure compliance with COSHH – Control of Substances hazardous to Health Regulations 2002 EH40/2005 Workplace exposure limits 3rd Ed. 2018 PUWER - Provision and Use of Work Equipment Regulations 1998 Health and Safety at Work Regulations 1974 Workplace Health, Safety and Welfare Regulations 1992			UWTSD H&S, Course leader, staff and Lab technicians.	
--	--	--	--	--	--	--	---	--

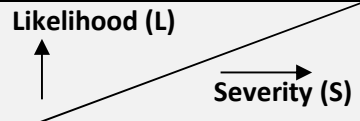
					Appropriate PPE for activity					
Local Extract ventilation (LEV)	No evidence identified during the audit visit to support the implementation of any associated Local Extract Ventilation solutions (LEV)	2	3	6	Conduct full assessment into the requirement of LEV in relation to use of chemicals and glues. All of the above to be, reviewed in accordance with COSHH data information and HSE exposure limits. Training provided for all users (training video provided, academic staff/lab tech deliver training session) Safety audits and workplace/activity inspections Conduct full assessment into the requirement of downdraft tables to minimise dust in the environment for specific activities such as sanding, cutting and filing of models. Use of appropriate PPE as instructed or required	1	2	2	UWTSD H&S, Course leader, staff and Lab technicians.	
Use of trimming knives, scalpels and similar Cuts from sharp edged tools (scalpels, knives, etc) Penetration injuries to body Striking from snapped blade (to body/eyes)	No evidence at time of audit to support equipment, tools, materials and chemicals such as spray mount, primers, glues and paints being provided and controlled by UWTSD Architect department.	4	4	16	Training provided for all users (training video provided, academic staff/lab tech deliver specific training session) detailing Hazards and control processes in place. Training videos and questions viewed and answered by all new students through UWSTD Moogole site. Safety audits and workplace/activity inspections	2	2	4	UWTSD H&S, Course leader, staff and Lab technicians.	

					Craft knives with retractable blades used wherever possible Cutting mats to be used Appropriate PPE for specific activity Encourage students to only, work within designated work place areas. Ensure compliance with following resgs; PUWER - Provision and Use of Work Equipment Regulations 1998 Health and Safety at Work Regulations 1974 Workplace Health, Safety and Welfare Regulations 1992					
Use of Hand tools, Saws, hammers and similar Cuts from sharp edged tools (Saws, chisels etc) Penetration injuries to body Inhalation of dust from cutting, sanding or filing. Blows to hands or fingers from hammers or mallets	No evidence at time of audit to support equipment, tools, materials and chemicals such as spray mount, primers, glues and paints being provided and controlled by UWTSD Architect department.	4	4	16	Training provided for all users (training video provided, academic staff/lab tech deliver specific training session) detailing Hazards and control processes in place. Conduct full assessment into the requirement of downdraft tables to minimise dust in the environment for specific activities such as sanding, cutting and filing of models. Eye protection used where appropriate. Gloves available to protect hands	2	2	4	UWTSD Course leader, Estates UWTSD H&S, Course leader, staff and Lab technicians.	

					Tools stored safely on tool wall or in cupboards and draws. Clamps, vices and cutting blocks available. Staff/lab tech give advice on proper use Ensure compliance with following resgs; PUWER - Provision and Use of Work Equipment Regulations 1998 Health and Safety at Work Regulations 1974 Workplace Health, Safety and Welfare Regulations 1992 Appropriate PPE for specific activity					
Noise Construction Lab activities	All staff/student have the potential to suffer discomfort and hearing damage caused by noise transfer from the adjacent construction laboratory activities and poor roller shutter acoustic protection.	2	3	6	Room Management and course leaders to communicate and coordinate noisy task from adjacent construction laboratory to avoid noise related discomfort being transferred via roller shutter into architectural Laboratory Conduct full assessment into either replacement of existing (new) roller shutter solution with an acoustic equivalent or the removal of existing roller shutter and replacement with suitable acoustic wall construction	1	2	2	UWTSD room management, H&S, Course leader, staff and Lab technicians.	

Electricity Death, Electrocution	- Mains powered portable equipment protected by RCBO/RCD to distribution board, wall socket or lead. - Sufficient outlets to support the range of equipment normally used without resorting to regular use of multi-socket adaptors. - Visual check prior to use	1	2	2	Electrical equipment subject to regular safety inspection and test ('PAT testing') Conduct full assessment Equipment safety audits and inspections prior to usage	1	2	2	UWTSD H&S, Course leader, staff and Lab technicians.	
Fire Storage of flammable materials/Design Models and chemicals	Upon Fire alarm activation all staff/students must leave the building safely and convene at the designated fire evacuation point.	1	2	2	Ensure compliance with current Regulatory Reform (Fire Safety) Order 2005)	1	2	2	UWTSD H&S, Course leader, staff and Lab technicians.	
First Aid	- First aid kits available to support department via construction Lab and main reception. - Contents regularly checked. - Nearest first aiders names displayed.	2	2	4	Provided Localised First aid station/kit First Aid training for associated staff Names of trained first aiders to be displayed Health and Safety at Work Regulations 1974 Workplace Health, Safety and Welfare Regulations 1992	2	2	4	UWTSD H&S, Course leader, staff and Lab technicians.	
Violence & Aggression	- If staff/students are, threatened or feel at risk, withdraw from the situation. - On site security presence - CCTV (as a deterrent effect) - Incidents of V&A to be reported to course leader in first instance	2	1	2	No further actions identified					

RISK MATRIX: (To generate the risk level).

Very likely 5	5	10	15	20	25
Likely 4	4	8	12	16	20
Possible 3	3	6	9	12	15
Unlikely 2	2	4	6	8	10
Extremely unlikely 1	1	2	3	4	5
Likelihood (L)  Severity (S)	Minor injury – No first aid treatment required 1	Minor injury – Requires First Aid Treatment 2	Injury - requires GP treatment or Hospital attendance 3	Major Injury 4	Fatality 5

ACTION LEVEL: (To identify what action needs to be taken).

POINTS:	RISK LEVEL:	ACTION:
1 – 2	NEGLIGIBLE	No further action is necessary.
3 – 5	TOLERABLE	Where possible, reduce the risk further
6 - 12	MODERATE	Additional control measures are required
15 – 16	HIGH	Immediate action is necessary
20 - 25	INTOLERABLE	Stop the activity/ do not start the activity

Appendix 2 – COSHH Assessment Architect Laboratory Rm 024 example for 3M Spray Mount

 Prifysgol Cymru Y Drindod Dewi Sant University of Wales Trinity Saint David		COSHH / DSEAR Risk Assessment			Ref No:																	
School/Service/Unit School of Architecture UWTSD Swansea Campus				Unit Safety Coordinator/Supervisor:																		
Describe the activity or work process. <i>(Inc. how long/ how often this is carried out and quantity substance used)</i>		Activity includes the process of gluing elements or specific part of the student's model to represent a building design vision. Activity conducted within lessons or periods of 2-3hrs over 3 weeks. The substance utilised for this particular task is 3M spray (Aerosol) Mount.																				
Location of process being carried out?		Room 024 Architect Laboratory																				
Identify the persons at risk:		Employees ☒	Students ☒	Public ☐																		
Name the substance(s) involved in the process <i>(A copy of a current safety data sheet is available.)</i>		3M spray (Aerosol) Mount.																				
Classification (state the category of danger)																						
<table border="0"> <tr> <td>☐ Very Toxic</td> <td>☒ Irritant- dermatitis causing</td> <td>☒ Extremely Flammable</td> </tr> <tr> <td>☒ Toxic</td> <td>☐ Sensitising</td> <td>☒ Highly Flammable</td> </tr> <tr> <td>☐ Corrosive</td> <td>☐ Biological</td> <td>☐ Flammable</td> </tr> <tr> <td>☒ Harmful-lung damage if swallowed</td> <td>☐ Oxidising</td> <td>☒ Environmental -aquatic organisms</td> </tr> </table>							☐ Very Toxic	☒ Irritant- dermatitis causing	☒ Extremely Flammable	☒ Toxic	☐ Sensitising	☒ Highly Flammable	☐ Corrosive	☐ Biological	☐ Flammable	☒ Harmful-lung damage if swallowed	☐ Oxidising	☒ Environmental -aquatic organisms				
☐ Very Toxic	☒ Irritant- dermatitis causing	☒ Extremely Flammable																				
☒ Toxic	☐ Sensitising	☒ Highly Flammable																				
☐ Corrosive	☐ Biological	☐ Flammable																				
☒ Harmful-lung damage if swallowed	☐ Oxidising	☒ Environmental -aquatic organisms																				
Hazard Type																						
<table border="0"> <tr> <td>☒</td> <td>☒</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Gas</td> <td>Vapour</td> <td>Mist</td> <td>Fume</td> <td>Dust</td> <td>Liquid</td> <td>Solid</td> <td>Other (State)</td> </tr> </table>							☒	☒	☒	☐	☐	☐	☐	☐	Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)
☒	☒	☒	☐	☐	☐	☐	☐															
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)															
Route of Exposure																						
<table border="0"> <tr> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Inhalation</td> <td>Skin</td> <td>Eyes</td> <td>Ingestion</td> <td>Other (State)</td> </tr> </table>							☒	☒	☒	☒	☐	Inhalation	Skin	Eyes	Ingestion	Other (State)						
☒	☒	☒	☒	☐																		
Inhalation	Skin	Eyes	Ingestion	Other (State)																		
Workplace Exposure Limits (WELs) please indicate n/a where not applicable. See the EH40																						
Long-term exposure level (8hrTWA): Assumes use at not more than 20°C above ambient temperature; Duration of exposure per day at workplace [for one worker]: 8 hours/day				Short-term exposure level (15 mins):																		
Risks to Health from Identified Hazards: Note appropriate Risk Phrases																						
Inhalation Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause target organ effects after inhalation. Skin contact Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain.																						

Dermal Defatting: Signs/symptoms may include localised redness, itching, drying and cracking of skin. Eye contact Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Ingestion Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal.

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below). Additional Health Effects: Single exposure may cause target organ effects: Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause: Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal. Reproductive/Developmental Toxicity: Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Control Measures: *Note engineering, PPE, ventilation and other requirements needed*

Use in a well-ventilated area. Do not remain in area where available oxygen may be, reduced.

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

Personal protective equipment (PPE)

Is health surveillance or monitoring required?

Yes ☒

No ☐

Personal Protective Equipment (state type and standard)

 ☐		 ☐	
Dust mask		Visor	
 ☒	If no adequate extract or dilution ventilation in place	 ☒	
Respirator		Goggles	
 ☒		 ☒	
Gloves		Overalls	
 ☒		 ☐	
Footwear		Other	

First Aid / Emergency Measures

Inhalation: Remove person to fresh air. Get medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eyes: Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

Ingestion: Do not induce vomiting. Get immediate medical attention.

Significant Spillage

Fire

Storage: Note type of storage required		
Storage: Store in well-ventilated space away from heat, acid and oxidising agents. Keep away from sunlight		
Disposal of Substances & Contaminated Containers		
Hazardous Waste ☒	Put Down Drain ☐	General Skip ☐
(If Other Please State):		

Is exposure adequately controlled?	Yes ☒	No ☐
Risk Rating Following Control Measures		
High ☐	Medium ☐	Low ☒

Assessed by: Richard Black	Date: 22/11/2018	Review Date: 22/11/2019
-----------------------------------	-------------------------	--------------------------------

Appendix 3 – Safety data and Technical data Sheets



Safety Data Sheet

Copyright, 2018, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group:	27-7264-8	Version number:	11.00
Revision date:	18/07/2018	Supersedes date:	31/07/2017
Transportation version number: 3.00 (03/08/2015)			

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M SprayMount Adhesive.

Product Identification Numbers

YP-2080-6050-6 YP-2080-6054-8

7000116723 7000116727

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Adhesive aerosol.

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Aerosol, Category 1 - Aerosol 1; H222, H229
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.



Revision Number: 001.3

Issue date: 12/05/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	Loctite® Super Glue All Purpose	IDH number:	1399967
Product type:	Cyanoacrylate	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:			
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: BONDS SKIN IN SECONDS.
COMBUSTIBLE LIQUID.
CAUSES EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
EYE IRRITATION	2B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

Response:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal:

Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Ethyl 2-cyanoacrylate	7085-85-0	80 - 90

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin contact:	Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or roll lips apart. Do not pull lips apart with direct opposing force.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive damage.
Ingestion:	Ensure breathing passages are not obstructed. The product will polymerize rapidly and bond to the mouth making it almost impossible to swallow. Saliva will separate any solidified product in several hours. Prevent the patient from swallowing any separated mass.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Ventilate area. Do not allow product to enter sewer or waterways.
-----------------------------------	---

Clean-up methods:

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal burns.

Storage:

For safe storage, store between -20 °C (-4°F) and 50 °C (122°F). Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	1 ppm STEL 0.2 ppm TWA (Respiratory sensitization) (Dermal sensitization)	None	None	None

Engineering controls:

Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection:

Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eyeface protection:

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection:

Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid, transparent
Color:	Colorless, Straw
Odor:	Irritating
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not available.
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Vapor density:	Not available.
Flash point:	80 - 93 °C (176°F - 199.4 °F)
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Not available.
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
Hazardous decomposition products:	None
Incompatible materials:	Water, amines, alkalis and alcohols.
Reactivity:	Not available.
Conditions to avoid:	Spontaneous polymerization.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation. Exposure to vapors above the established exposure limit results in respiratory irritation, which may lead to difficulty in breathing and tightness in the chest.
Skin contact:	May cause skin irritation. Bonds skin in seconds. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin. Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare.
Eye contact:	Irritating to eyes. Causes excessive tearing. Eyelids may bond.
Ingestion:	Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It is almost impossible to swallow.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III
Exceptions: (Not more than 450 Liters), Unrestricted

International Air Transportation (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: 9
Identification number: UN 3334
Packing group: III
Exceptions: Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 12/05/2018

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.



TECHNICAL DATA SHEET



SUPER GLUE LIQUID 3 Pack 1 Gram

Henkel Corporation

Professional and Consumer Adhesives
Rocky Hill, CT 06067
Phone 1-800-624-7767
Fax (440) 250-7863

www.henkel.com www.loctiteproducts.com



DESCRIPTION

Loctite® Super Glue Liquid works fast and holds strong even on hard to bond acidic surfaces thanks to a patented additive. The liquid formula works well on a variety of porous and non-porous surfaces. It dries clear and sets without clamping. Loctite Super Glue Liquid is resistant to moisture, most chemicals and freezing temperatures. The convenient mini tubes allow for quick and convenient repairs with no mess

RECOMMENDED FOR:

Use for repairing figurines, costume jewelry, cameras, toys, metal car parts, wiper blades, rubber seals and O-rings. Bonds leather, cork, paper, cardboard, wood, chipboard, fabric, metal, ceramic, rubber and hard plastics such as acrylic, polycarbonate, polystyrene and PVC.

NOT RECOMMENDED FOR:

- Polystyrene foam, foam rubber, pure bone china, glass, silicone rubber, PTFE, polyethylene and polypropylene
- Glazed surfaces
- Use on repairs needing high flexibility (vibrating and moving parts) or for gap filling applications
- Use in dishwasher, oven or microwave
- Exterior applications

FEATURES & BENEFITS:

Feature	Benefits
Dries transparent.....	Invisible repairs
Sets in seconds.....	No clamping required
Mini Tubes	Easy storage for fast repairs at home or on-the-go
Ergonomic easy-grip caps	Self-piercing
Vacuum-packed	Long shelf-life

DIRECTIONS

Tools Typically Required:

Tissue paper.

Safety Precautions:

Apply in a well ventilated area. Wear gloves.

Preparation:

Surfaces must be clean, close fitting with no gaps, dry and free from oil, wax and paint. Protect work area. Lightly roughen smooth surfaces for better adhesion. Pre-fit parts to be joined.

Application:

In a clockwise direction, screw the cap assembly tightly onto the tube to pierce the foil seal. Unscrew the top cap in a counter clockwise direction. Squeeze the tube to dispense one drop per square inch of surface. Press surfaces together immediately. Hold in place for 15 to 30 seconds until bond sets. Do not reposition parts. Clean tip with tissue and replace the cap screwing it down tightly in a clockwise direction.

Loctite® Super Glue Liquid

3 Pack 1 Gram

Page 1 of 2

Clean-up

After cleaning, wet any tissue used for wiping off glue with water and dispose of. When cleaning up larger quantities of uncured adhesive, apply water and allow to cure and then scrape up. Note this may result in damage to the surfaces. Cured adhesive may be cut away with caution using a sharp blade, removed with acetone or with boiling water.

STORAGE AND DISPOSAL

Not damaged by freezing in the unopened container. Optimal shelf life is achieved when unopened container is stored from 36°F to 46°C (2°C to 8°C). After opening, it is not recommended that the product be stored cold or frozen. Once opened, the product is best stored tightly sealed in a dry location away from heat sources or sun exposure. Humidity and high temperatures may decrease shelf life. Use an approved hazardous waste facility for disposal.

LABEL PRECAUTIONS

WARNING! Contains Cyanoacrylate. Can cause severe eye injury. Bonds skin instantly. May cause allergic skin reaction. Skin contact may cause burns. Use in a well ventilated area. Avoid contact with skin and eyes. **FIRST AID:** In case of eye contact, flush with water for 15 minutes, call a physician. For skin contact, flush with water. For ingestion do not induce vomiting, call a physician. If spilled on clothing flush with large quantities of water. **KEEP OUT OF THE REACH OF CHILDREN.** Conforms to ASTM D4236

Refer to the Material Safety Data Sheet (MSDS) for further information

DISCLAIMER

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties	
<u>Color:</u>	Clear and colorless	<u>Application Temperature:</u>	Apply at temperatures above 50°F (10°C)
<u>Appearance:</u>	Liquid	<u>Odor:</u>	Sharp, irritating (Apply in a well ventilated area)
<u>Base:</u>	Ethyl cyanoacrylate	<u>Fixture Time:</u>	15 to 30 seconds
<u>Specific Gravity:</u>	1.05	<u>Max. Strength Cured Time:</u>	12 to 24 hours
<u>Flashpoint:</u>	150°F (65°C) to 200°F (93°C)		
<u>VOC Content:</u>	< 20 g/L (2% by weight)		
<u>Shelf Life:</u>	36 months from date of manufacture (unopened)		
<u>Lot Code Explanation:</u>	YDDDXX Y = Year DDD = Day of manufacture based on 365 days in a year XX = Disregard For example: 3061 = 61 st day of 2013 = March 2, 2013		

(Lot code printed on
bottom of bottle)

Typical Cured Performance Properties

<u>Color:</u>	Clear and colorless
<u>Moisture Resistance:</u>	Yes
<u>Cured form:</u>	Non-flammable, hard, brittle solid.
<u>Service Temperature:</u>	Up to 180°F (82°C)
<u>Tensile Strength:</u> (60 minute RT Cure, IPA Wiped Aluminum Lap Shears)	15.5 N / m ² minimum



THE PERFECT FINISH

SAFETY DATA SHEET

Plastikote Super Matt - White

According to Regulation (EC) No 1907/2006, Annex II, as amended., COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Plastikote Super Matt - White

Product number 433.0049009.076.09022015

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Paint.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier PlastiKote Ltd.
675 Eskdale Road,
Winnersh,
Wokingham, Berkshire,
RG41 5TS
UK
T: +44 (0) 844 736 2235
sds@plasti-kote.co.uk

1.4. Emergency telephone number

Emergency telephone +44(0) 844 736 2235
08:00 - 17:00 h (UK)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Plastikote Super Matt - White

Precautionary statements	P102 Keep out of reach of children.
	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211 Do not spray on an open flame or other ignition source.
	P251 Do not pierce or burn, even after use.
	P271 Use only outdoors or in a well-ventilated area.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312 Call a POISON CENTER/ doctor if you feel unwell.
	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Supplemental label information	P501 Dispose of contents/ container in accordance with national regulations.
	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	Acetone, Propan-2-ol
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P337+P313 If eye irritation persists: Get medical advice/ attention.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Acetone		10-30%
CAS number: 67-64-1	EC number: 200-662-2	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		
Propane		10-30%
CAS number: 74-98-6	EC number: 200-827-9	
Classification Flam. Gas 1 - H220 Press. Gas, Liquefied - H280		
Butane		10-30%
CAS number: 106-97-8	EC number: 203-448-7	
Classification Flam. Gas 1 - H220 Press. Gas, Liquefied - H280		

Plastikote Super Matt - White

Titanium dioxide CAS number: 1317-80-2 EC number: 215-282-2 Substance with National workplace exposure limits.	5-10%
Classification Not Classified	
Calcium carbonate CAS number: 1317-65-3 EC number: 215-279-6 Substance with National workplace exposure limits.	5-10%
Classification Not Classified	
Distillates (Petroleum), Hydrotreated light CAS number: 64742-47-8 EC number: 265-149-8	5-10%
Classification Asp. Tox. 1 - H304	
isobutyl acetate CAS number: 110-19-0 EC number: 203-745-1 Substance with National workplace exposure limits.	5-10%
Classification Flam. Liq. 2 - H225	
Propan-2-ol CAS number: 67-63-0 EC number: 200-661-7	1-5%
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	
Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene) CAS number: 64742-89-8 EC number: 265-192-2	1-5%
Classification Asp. Tox. 1 - H304	

Plastikote Super Matt - White

Amorphous silica CAS number: 112926-00-8 Substance with National workplace exposure limits.	<1%
Classification Not Classified	
Aluminium hydroxide CAS number: 21645-51-2 EC number: 244-492-7 Substance with National workplace exposure limits.	<1%
Classification Not Classified	
Xylene CAS number: 1330-20-7 EC number: 215-535-7	<1%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	
Silica CAS number: 14808-60-7 EC number: 238-878-4	<1%
Classification STOT RE 2 - H373	
Ethylbenzene CAS number: 100-41-4 EC number: 202-849-4	<1%
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304	
2-Ethylhexanoic acid, zirconium salt CAS number: 22464-99-9 EC number: 245-018-1	<1%
Classification Repr. 2 - H361d	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Plastikote Super Matt - White

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person warm and at rest. If in doubt, get medical attention promptly.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Pressurised container: may burst if heated The product is extremely flammable. In use may form flammable/explosive vapour-air mixture.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water spray to reduce vapours.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Plastikote Super Matt - White

Personal precautions Avoid heat, flames and other sources of ignition. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Avoid inhalation of vapours/spray and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Exposure to aquatic environment unlikely. Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Provide adequate ventilation. Absorb spillage with oil-absorbing material.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. During application and drying, solvent vapours will be emitted. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Avoid exposing aerosol containers to high temperatures or direct sunlight. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Acetone

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

Butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

Titanium dioxide

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Calcium carbonate

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

isobutyl acetate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³

Short-term exposure limit (15-minute): WEL 187 ppm 903 mg/m³

Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

Plastikote Super Matt - White

Amorphous silica

Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust
 Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust

Aluminium hydroxide

Long-term exposure limit (8-hour TWA): WEL 2 mg/m³

Xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
 Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³
 Sk

Silica

Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³ respirable dust

Ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³
 Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³
 Sk

2-Ethylhexanoic acid, zirconium salt

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³
 Short-term exposure limit (15-minute): WEL 10 mg/m³
 as Zr

WEL = Workplace Exposure Limit
 Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Personal protective equipment for eye and face protection should comply with European Standard EN166. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Frequent changes are recommended. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Hygiene measures

When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.

Respiratory protection

This product must not be handled in a confined space without adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Contains low-boiling liquids. Use an air-supplied respirator, if necessary. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Thermal hazards

Contact with liquid form may cause frostbite.

Plastikote Super Matt - White

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	White.
Odour	Organic solvents.
pH	Not relevant. The product is insoluble in water.
Melting point	Not available. Technically not feasible.
Initial boiling point and range	-42 °C - 0°C @ 760 mm Hg
Flash point	< -60°C CC (Closed cup).
Evaporation rate	No information available. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 2 % Upper flammable/explosive limit: 10 %
Vapour pressure	1000 mbar @ 20°C
Vapour density	> 1 Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Relative density	~ 0.85
Solubility(ies)	Immiscible with water. Soluble in the following materials: Organic solvents.
Auto-ignition temperature	~450°C
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	The product is extremely flammable.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatility	Highly volatile.
------------	------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
-----------	---

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable.
------------------------------------	-----------------

10.4. Conditions to avoid

Conditions to avoid	When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.
---------------------	--

Plastikote Super Matt - White

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data May cause defatting of the skin but is not an irritant. Repeated exposure may cause skin dryness or cracking.

Extreme pH Not relevant.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Central nervous system depression. Vapours may cause drowsiness and dizziness.

Target organs No specific target organs known.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant.

Plastikote Super Matt - White

Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	Irritation of eyes and mucous membranes.
Acute and chronic health hazards	A single exposure may cause the following adverse effects: Drowsiness.
Route of entry	Inhalation Dermal
Target organs	No specific target organs known.
Medical symptoms	Fatigue. Headache. Coughing. Dry skin.
Medical considerations	Skin disorders and allergies.

Toxicological information on ingredients.

Acetone

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,800.0

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 15,800.0

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information.

ATE dermal (mg/kg) 15,800.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 132.0

Species Rat

Notes (inhalation LC₅₀) REACH dossier information.

ATE inhalation (vapours mg/l) 132.0

Skin corrosion/irritation

Animal data Dose: 0.01mL, 3 days, Rat
Based on available data the classification criteria are not met.

Serious eye damage/irritation

Plastikote Super Matt - White

Serious eye damage/irritation	Slightly irritating.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOEL 79 mg/mouse/application, Dermal, Mouse Based on available data the classification criteria are not met.
Target organ for carcinogenicity	Not relevant.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	One-generation study - NOEL 4858 mg/kg/day, Oral, Mouse P Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEC: 2200 ppm, Inhalation, Rat Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo.
Target organs	Central nervous system
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Target organs	Not relevant.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Propane

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Technically not feasible.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Technically not feasible.
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ gases ppmV)	800,000.0

Plastikote Super Matt - White

Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information.
ATE inhalation (gases ppm)	800,000.0
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Screening - NOAEC 9000 ppm, Inhalation, Rat P Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Butane

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Technically not feasible.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Technically not feasible.
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ gases ppmV)	539,600.0

Plastikote Super Matt - White

Species	Mouse
Notes (inhalation LC₅₀)	REACH dossier information. Based on available data the classification criteria are not met.
ATE inhalation (gases ppm)	539,600.0
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Technically not feasible.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Not determined. Scientifically unjustified.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility - NOAEC 9000 ppm, Inhalation, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEC 9000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
<u>Titanium dioxide</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	No information available. Scientifically unjustified.
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	6.82

Plastikote Super Matt - White

Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information. Based on available data the classification criteria are not met.
ATE inhalation (dusts/mists mg/l)	6.82
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 g, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 50 mg/m ³ , Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No information available.
Reproductive toxicity - development	No information available.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEC 10 mg/m ³ , Inhalation, Rat REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	

Plastikote Super Matt - White

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Calcium carbonate

Acute toxicity - oral

Notes (oral LD₅₀) > 2000 mg/kg Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) > 2000 mg/kg Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5g, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0).
Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation There is no evidence that the product can cause respiratory hypersensitivity.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative.
Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Not determined. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 1000 mg/kg/day, Oral, Rat P
Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEC: >1.25 % w/w, Oral, Rat
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 1000 mg/kg, Oral, Rat
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Distillates (Petroleum), Hydrotreated light

Acute toxicity - oral

Plastikote Super Matt - White

Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met. Repeated exposure may cause skin dryness or cracking.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Buehler test - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	LOAEL 250 mg/kg/day, Dermal, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility - NOAEL 750 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Embryotoxicity: - NOAEL: 1000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	

Plastikote Super Matt - White

STOT - repeated exposure NOAEL 750 mg/kg/day, Oral, Rat
REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Harmful: may cause lung damage if swallowed.

isobutyl acetate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 13,413.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Conclusive data but not sufficient for classification.

ATE oral (mg/kg) 13,413.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 17,400.0

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information. Conclusive data but not sufficient for classification.

ATE dermal (mg/kg) 17,400.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 30.0

Species Rat

Notes (inhalation LC₅₀) REACH dossier information. Conclusive data but not sufficient for classification.

ATE inhalation (vapours mg/l) 30.0

Skin corrosion/irritation

Animal data Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0).
REACH dossier information. Based on available data the classification criteria are not met.

Extreme pH Moderate pH (> 2 and < 11.5).

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
REACH dossier information. Based on available data the classification criteria are not met.

Plastikote Super Matt - White

Germ cell mutagenicity

Genotoxicity - in vitro	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	No information available.
------------------------	---------------------------

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEC 2500 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 10 mg/l, Inhalation, REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
-------------------------------	---

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOEL 316 mg/kg, Oral, Rat REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.
---------------------------------	---

Aspiration hazard

Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
--------------------------	---

Propan-2-ol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	5,840.0
Species	Rat
Notes (oral LD₅₀)	REACH dossier information. Based on available data the classification criteria are not met.
ATE oral (mg/kg)	5,840.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	13,120.0
Species	Rabbit
Notes (dermal LD₅₀)	REACH dossier information. Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	13,120.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
---	--

Plastikote Super Matt - White

Skin corrosion/irritation

Animal data Dose: , 4 hours, Rabbit Primary dermal irritation index: 0
REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising.
REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOEL 5000 ppm, Inhalation, Rat
REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 500 mg/kg/day, Oral, Rat F1
REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: 240 mg/kg/day, Oral, Rat
REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Acute toxicity - oral

Plastikote Super Matt - White

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Mouse

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,000.0

Species Rabbit

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 3,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2).
Oedema score: Slight oedema - edges of area well defined by definite raising (2).
REACH dossier information. Slightly irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising.
REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 0.05 ml, Dermal, Mouse
REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEC 20000 mg/m³, Inhalation, Rat P
REACH dossier information. Based on available data the classification criteria are not met.

Plastikote Super Matt - White

Reproductive toxicity - development Maternal toxicity: - NOAEL: 23900 mg/m³, Inhalation, Rat
REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 1402 mg/m³, Inhalation, Rat
REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Harmful: may cause lung damage if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

Acetone

Toxicity Not considered toxic to fish.

Acute toxicity - fish LC₅₀, 96 hours: 5540 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 12700 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOEC, 192 hours: 530 mg/l, Microcystis aeruginosa

Chronic toxicity - aquatic invertebrates NOEC, 28 days: 2212 mg/l, Daphnia magna

Propane

Acute toxicity - fish LC₅₀, 96 hours: 27.98 mg/l, Estimated value.

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 14.22 mg/l, Estimated value.

Acute toxicity - aquatic plants EC₅₀, 96 hours: 7.71 mg/l, Estimated value.

Chronic toxicity - fish early life stage No information available.

Butane

Acute toxicity - fish LC₅₀, 96 hours: 24.1 mg/l, Estimated value.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 14.2 mg/l, Estimated value.

Plastikote Super Matt - White

Acute toxicity - aquatic plants

EC₅₀, 96 hours: 7.7 mg/l,
Estimated value.

Titanium dioxide

Acute toxicity - fish

LC₅₀, 96 hours: 1000 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 100 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 61 mg/l, Pseudokirchneriella subcapitata
REACH dossier information.

Calcium carbonate

Acute toxicity - fish

LC₅₀, 96 hours: >100 % v/v, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >100 % v/v, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 72 hours: >14 mg/l,

Distillates (Petroleum), Hydrotreated light

Acute toxicity - fish

LL₅₀, 96 hours: 2.5 mg/l, Onchorhynchus mykiss (Rainbow trout)
REACH dossier information.

Acute toxicity - aquatic invertebrates

EL50, 48 hours: 1.4 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants

EL50, 72 hours: 1.3 mg/l, Pseudokirchneriella subcapitata
REACH dossier information.

isobutyl acetate

Acute toxicity - fish

LC₅₀, 96 hours: 17 mg/l, Oryzias latipes (Red killifish)
REACH dossier information.

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 25 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 370 mg/l, Selenastrum capricornutum
REACH dossier information.

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 23 mg/l, Daphnia magna
REACH dossier information.

Propan-2-ol

Acute toxicity - fish

LC₅₀, 96 hours: 10000 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.

Acute toxicity - aquatic invertebrates

LC₅₀, 24 hours: > 10000 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants

LOEC, 192 hours: 1800 mg/l, Scenedesmus subspicatus
REACH dossier information.

Plastikote Super Matt - White

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Acute toxicity - fish	LC ₅₀ , 96 hours: 8.2 ppm, Pimephales promelas (Fat-head Minnow) REACH dossier information.
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 4.5 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EL50, 72 hours: 3.1 mg/l, Selenastrum capricornutum REACH dossier information.
<u>Chronic aquatic toxicity</u>	
NOEC	
Degradability	--

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. Volatile substances are degraded in the atmosphere within a few days.

Ecological information on ingredients.

Acetone

Persistence and degradability	The substance is readily biodegradable.
Phototransformation	Water - DT ₅₀ : 20-115 days
Stability (hydrolysis)	No significant reaction in water.
Biodegradation	Water - Degradation 90: 28 days

Propane

Persistence and degradability	Highly volatile.
Phototransformation	Water - DT ₅₀ : 1906 days
Stability (hydrolysis)	Not applicable.
Biodegradation	Water - 100%: 385.5 hours

Butane

Phototransformation	Not determined.
Stability (hydrolysis)	No significant reaction in water.
Biodegradation	Water - DT ₅₀ : 3.5 days Estimated value. The substance is readily biodegradable.

Titanium dioxide

Phototransformation	No information available.
Stability (hydrolysis)	No significant reaction in water.

Plastikote Super Matt - White

Biodegradation

Not applicable.
Substance is inorganic.

Calcium carbonate

Persistence and degradability

Substance is inorganic.

Distillates (Petroleum), Hydrotreated light

Phototransformation

Not determined.

Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - Degradation 61: 28 days
REACH dossier information.
Readily biodegradable but failing the 10-day window.

isobutyl acetate

Phototransformation

Water - Half-life : ~ 3.5 days
Estimated value.
REACH dossier information.

Stability (hydrolysis)

pH7 - Half-life : ~ 3.3 years @ 25°C
Estimated value.
REACH dossier information.

Biodegradation

Water - Degradation 81: 20 days
REACH dossier information.
The substance is readily biodegradable.

Propan-2-ol

Phototransformation

Not available.

Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - Degradation 53%: 5 days

REACH dossier information.
The substance is readily biodegradable.

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Phototransformation

Technically not feasible.

Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - Degradation 77.05: 28 days
REACH dossier information.
The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

Plastikote Super Matt - White

Acetone

Bioaccumulative potential BCF: 3,
Estimated value.

Partition coefficient log Pow: -0.24

Propane

Partition coefficient log Pow: 1.09

Butane

Bioaccumulative potential The product is not bioaccumulating.

Titanium dioxide

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Not applicable. Substance is inorganic.

Calcium carbonate

Bioaccumulative potential No data available on bioaccumulation.

Distillates (Petroleum), Hydrotreated light

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

isobutyl acetate

Bioaccumulative potential BCF: 15.3, Estimated value.
REACH dossier information. The product is not bioaccumulating.

Partition coefficient log Pow: 2.3

Propan-2-ol

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.05

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Kow: > 3

12.4. Mobility in soil

Mobility The product is immiscible with water and will spread on the water surface. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

Acetone

Plastikote Super Matt - White

Mobility Highly volatile. Soluble in water.

Henry's law constant 2.303 Pa m³/mol @ 15°C

Propane

Mobility Highly volatile.

Butane

Mobility The product is insoluble in water. Highly volatile.

Titanium dioxide

Mobility The product is insoluble in water and will sediment in water systems.

Calcium carbonate

Mobility No information available.

Distillates (Petroleum), Hydrotreated light

Mobility The product is insoluble in water and will spread on the water surface. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

isobutyl acetate

Mobility The product is insoluble in water and will spread on the water surface.

Adsorption/desorption coefficient Water - log K_{oc}: < 3 @ °C Estimated value.
REACH dossier information.

Henry's law constant 41.6 Pa m³/mol @ °C
REACH dossier information.

Surface tension 62.5 mN/m @ 20°C
REACH dossier information.

Propan-2-ol

Mobility Volatile liquid. The product is miscible with water and may spread in water systems.

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Mobility The product is insoluble in water and will spread on the water surface. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient Water - log K_{oc}: ~ 2 @ °C
REACH dossier information.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Plastikote Super Matt - White

Acetone

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Propane

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Butane

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Titanium dioxide

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Calcium carbonate

Results of PBT and vPvB assessment Substance is inorganic.

Distillates (Petroleum), Hydrotreated light

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

isobutyl acetate

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Propan-2-ol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

Acetone

Other adverse effects None known.

Propane

Plastikote Super Matt - White

Other adverse effects None known.

Butane

Other adverse effects None known.

Titanium dioxide

Other adverse effects None known.

Calcium carbonate

Other adverse effects None known.

Distillates (Petroleum), Hydrotreated light

Other adverse effects None known.

isobutyl acetate

Other adverse effects None known.

Propan-2-ol

Other adverse effects None known.

Solvent naphtha (Petroleum), Light aliphatic (<0.1 % Benzene)

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Information given is applicable to the product as supplied. When handling waste, the safety precautions applying to handling of the product should be considered. Do not puncture or incinerate, even when empty. Reuse or recycle products wherever possible.
Disposal methods	Do not empty into drains. Dispose of waste product or used containers in accordance with local regulations Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
Waste class	Information given is applicable to the product as supplied. [08 01 11*] / [20 01 27*]

SECTION 14: Transport information

General	For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
----------------	---

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

Plastikote Super Matt - White

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) Aerosols, flammable

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2 (5F)

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not relevant.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
EH40/2005 Workplace exposure limits.

Plastikote Super Matt - White

EU legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Health and environmental listings

Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (as amended). Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (as amended). Regulation (EC) 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals (as amended).

None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

SEVESO

P3a - Lower tier 150 tonnes, Upper tier 500 tonnes.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 IMDG: International Maritime Dangerous Goods.
 IATA: International Air Transport Association.
 ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 ATE: Acute Toxicity Estimate.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 NOAEC: No Observed Adverse Effect Concentration.
 EC₅₀: 50% of maximal Effective Concentration.
 PBT: Persistent, Bioaccumulative and Toxic substance.
 vPvB: Very Persistent and Very Bioaccumulative.
 BCF: Bioconcentration Factor.
 Kow: Octanol-water partition coefficient.

Classification abbreviations and acronyms

Aerosol = Aerosol
 Eye Irrit. = Eye irritation
 STOT SE = Specific target organ toxicity-single exposure

Classification procedures according to Regulation (EC) 1272/2008

Aerosol 1 - H222, H229, Eye Irrit. 2 - H319, STOT SE 3 - H336: Calculation method.

Revision date

07/03/2016

Revision

3

Plastikote Super Matt - White

Supersedes date	09/02/2015
SDS number	1014
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated H229 Pressurised container: may burst if heated H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols:

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS09 (Environment) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Acetone	67-64-1	200-662-2	25 - 40

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container. may burst if heated.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

General:

P102	Keep out of reach of children.
------	--------------------------------

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.

Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
-------------	--

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
------	--

Contains 10% of components with unknown hazards to the aquatic environment.

Notes on labelling

H304 is not required on the label because the product is an aerosol.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Acetone	67-64-1	200-662-2	01- 2119471330- 49	25 - 40	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066
Butane	106-97-8	203-448-7	01- 2119474691- 32	10 - 20	Flam. Gas 1, H220; Liquefied gas, H280 - Nota C,U
Propane	74-98-6	200-827-9	01- 2119486944- 21	10 - 20	Flam. Gas 1, H220; Liquefied gas, H280 - Nota U
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		927-510-4	01- 2119475515- 33	7 - 13	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411
Non-volatiles	Trade Secret			5 - 10	Substance not classified as hazardous
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane		931-254-9	01- 2119484651- 34	5 - 10	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411
Isobutane	75-28-5	200-857-2	01- 2119485395- 27	5 - 10	Flam. Gas 1, H220; Liquefied gas, H280 - Nota C,U
Non Volatile Compound	Trade Secret			1 - 5	Substance not classified as hazardous
Pentane	109-66-0	203-692-4		1 - 5	Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411 - Nota C
2-methylbutane	78-78-4	201-142-8		0.5 - 2	Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; EUH066; Aquatic Chronic 2, H411
n-hexane	110-54-3	203-777-6		0 - 1	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Repr. 2, H361f; STOT SE 3, H336; STOT RE 2, H373; Aquatic Chronic 2, H411
Cyclohexane	110-82-7	203-806-2		0 - 0.5	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1

Note: Any entry in the EC# column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

Please see section 16 for the full text of any H statements referred to in this section

3M SprayMount Adhesive.

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish. Water spray or fog may be used. Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

Aldehydes.
Hydrocarbons.
Carbon monoxide.
Carbon dioxide.

Condition

During combustion.
During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or

3M SprayMount Adhesive.

exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Butane	106-97-8	UK HSC	TWA:1450 mg/m ³ (600 ppm);STEL:1810 mg/m ³ (750 ppm)	
Pentane	109-66-0	UK HSC	TWA:1800 mg/m ³ (600 ppm)	
n-hexane	110-54-3	UK HSC	TWA:72 mg/m ³ (20 ppm)	
Cyclohexane	110-82-7	UK HSC	TWA:350 mg/m ³ (100 ppm)	

3M SprayMount Adhesive.

Acetone	67-64-1	UK HSC	ppm);STEL:1050 mg/m ³ (300 ppm) TWA:1210 mg/m ³ (500 ppm);STEL:3620 mg/m ³ (1500 ppm)	
Propane	74-98-6	UK HSC	Limit value not established:	asphyxiant
2-methylbutane	78-78-4	UK HSC	TWA:1800 mg/m ³ (600 ppm)	

UK HSC : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	13,964 mg/kg bw/d
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	5,306 mg/m ³
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	300 mg/kg bw/d
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	2,085 mg/m ³

Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Agricultural soil	0.53 mg/kg d.w.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Freshwater	0.096 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Freshwater sediments	2.5 mg/kg d.w.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Marine water	0.096 mg/l
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		Marine water sediments	2.5 mg/kg d.w.

8.2. Exposure controls

In addition, refer to the annex for more information.

8.2.1. Engineering controls

Use in a well-ventilated area. Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	No data available	No data available
Polymer laminate	No data available	No data available

Applicable Norms/Standards

Use gloves tested to EN 374

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapour respirators may have short service life.

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

Use a respirator conforming to EN 140 or EN 136: filter types A & P

8.2.3. Environmental exposure controls

Refer to Annex

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Liquid.
Specific Physical Form:	Aerosol
Appearance/Odour	Transparent- white liquid in Aerosol; Strong ketone odour
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	<i>Not applicable.</i>
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified

3M SprayMount Adhesive.

Flash point	-46 °C [Test Method: Closed Cup]
Autoignition temperature	No data available.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Relative density	0.706 [Ref Std: WATER=1]
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	No data available.
Vapour density	Not applicable.
Decomposition temperature	No data available.
Viscosity	Not applicable.
Density	0.706 g/ml

9.2. Other information

EU Volatile Organic Compounds	No data available.
Percent volatile	88.5 % weight

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause target organ effects after inhalation.

Skin contact

Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. Dermal Defatting: Signs/symptoms may include localised redness, itching, drying and cracking of skin.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapour (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
Butane	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
Isobutane	Inhalation-Gas (4 hours)	Rat	LC50 276,000 ppm
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation-Vapour (4 hours)	Not available	LC50 > 20 mg/l

3M SprayMount Adhesive.

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Dermal		LD50 > 5,000 mg/kg
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Inhalation-Vapour (4 hours)	Rat	LC50 > 20 mg/l
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Ingestion	Rat	LD50 > 5,000 mg/kg
Pentane	Dermal	Rabbit	LD50 3,000 mg/kg
Pentane	Inhalation-Vapour (4 hours)	Rat	LC50 > 18 mg/l
Pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Non-volatiles	Dermal		LD50 estimated to be > 5,000 mg/kg
Non-volatiles	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Non Volatile Compound	Dermal		LD50 estimated to be > 5,000 mg/kg
Non Volatile Compound	Ingestion	Rat	LD50 > 34,000 mg/kg
2-methylbutane	Dermal	Rabbit	LD50 3,000 mg/kg
2-methylbutane	Inhalation-Vapour (4 hours)	Rat	LC50 > 18 mg/l
2-methylbutane	Ingestion	Rat	LD50 > 2,000 mg/kg
n-hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-hexane	Inhalation-Vapour (4 hours)	Rat	LC50 170 mg/l
n-hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-Vapour (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Acetone	Mouse	Minimal irritation
Propane	Rabbit	Minimal irritation
Butane	Professional judgement	No significant irritation
Isobutane	Professional judgement	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Professional judgement	Irritant
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Not available	Irritant
Pentane	Rabbit	Minimal irritation
Non-volatiles	Professional judgement	No significant irritation
2-methylbutane	Rabbit	Minimal irritation
n-hexane	Human and animal	Mild irritant
Cyclohexane	Rabbit	Mild irritant

Serious Eye Damage/Irritation

3M SprayMount Adhesive.

Name	Species	Value
Acetone	Rabbit	Severe irritant
Propane	Rabbit	Mild irritant
Butane	Rabbit	No significant irritation
Isobutane	Professional judgement	No significant irritation
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Professional judgement	No significant irritation
Pentane	Rabbit	Mild irritant
2-methylbutane	Rabbit	Mild irritant
n-hexane	Rabbit	Mild irritant
Cyclohexane	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not available	Not classified
Pentane	Guinea pig	Not classified
Non-volatiles	Professional judgement	Not classified
2-methylbutane	Guinea pig	Not classified
n-hexane	Human	Not classified

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Propane	In Vitro	Not mutagenic
Butane	In Vitro	Not mutagenic
Isobutane	In Vitro	Not mutagenic
Pentane	In vivo	Not mutagenic
Pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-methylbutane	In vivo	Not mutagenic
2-methylbutane	In Vitro	Some positive data exist, but the data are not sufficient for classification
n-hexane	In Vitro	Not mutagenic
n-hexane	In vivo	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Acetone	Not specified.	Multiple animal species	Not carcinogenic
n-hexane	Dermal	Mouse	Not carcinogenic
n-hexane	Inhalation	Mouse	Some positive data exist, but the data are not

3M SprayMount Adhesive.

sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
Pentane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
Pentane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis
2-methylbutane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
2-methylbutane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis
n-hexane	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
n-hexane	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation
n-hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days
Cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Propane	Inhalation	cardiac sensitisation	Causes damage to organs	Human	NOAEL Not available	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Propane	Inhalation	respiratory irritation	Not classified	Human	NOAEL Not available	
Butane	Inhalation	cardiac sensitisation	Causes damage to organs	Human	NOAEL Not available	
Butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	

3M SprayMount Adhesive.

Butane	Inhalation	heart	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
Butane	Inhalation	respiratory irritation	Not classified	Rabbit	NOAEL Not available	
Isobutane	Inhalation	cardiac sensitisation	Causes damage to organs	Multiple animal species	NOAEL Not available	
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
Pentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
Pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
2-methylbutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
2-methylbutane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
2-methylbutane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
2-methylbutane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
n-hexane	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
------	-------	-----------------	-------	---------	-------------	----------

3M SprayMount Adhesive.

						Duration
Acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Butane	Inhalation	kidney and/or bladder blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
Isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
Pentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Pentane	Inhalation	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
Pentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
2-methylbutane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
2-methylbutane	Inhalation	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory	Not classified	Rat	NOAEL 20 mg/l	13 weeks

3M SprayMount Adhesive.

		system				
2-methylbutane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
n-hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
n-hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
n-hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
n-hexane	Inhalation	auditory system immune system eyes	Not classified	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	heart skin endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
n-hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Ingestion	endocrine system hematopoietic system liver immune system kidney and/or bladder	Not classified	Rat	NOAEL Not available	13 weeks
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 weeks

Aspiration Hazard

Name	Value
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration hazard
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	Aspiration hazard
Pentane	Aspiration hazard
2-methylbutane	Aspiration hazard
n-hexane	Aspiration hazard
Cyclohexane	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

3M SprayMount Adhesive.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Acetone	67-64-1	Algae other	Experimental	96 hours	EC50	11,493 mg/l
Acetone	67-64-1	Crustacea other	Experimental	24 hours	LC50	2,100 mg/l
Acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
Acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
Butane	106-97-8		Data not available or insufficient for classification			
Propane	74-98-6		Data not available or insufficient for classification			
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4		Data not available or insufficient for classification			
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane	931-254-9		Data not available or insufficient for classification			
Isobutane	75-28-5		Data not available or insufficient for classification			
Non-volatiles	Trade Secret		Data not available or insufficient for classification			
Non Volatile Compound	Trade Secret		Data not available or insufficient for classification			
Pentane	109-66-0	Water flea	Experimental	48 hours	EC50	2.7 mg/l
Pentane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
Pentane	109-66-0	Green Algae	Experimental	72 hours	EC50	10.7 mg/l
Pentane	109-66-0	Green Algae	Experimental	72 hours	NOEC	2.04 mg/l
2-methylbutane	78-78-4		Data not available or insufficient for classification			
n-hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
n-hexane	110-54-3	Water flea	Experimental	48 hours	LC50	3.9 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acetone	67-64-1	Experimental Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	Other methods
Acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 % weight	OECD 301D - Closed bottle test
Butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	Other methods
Propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	Other methods
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Estimated Biodegradation	28 days	BOD	98 % BOD/ThBOD	OECD 301F - Manometric respirometry
Hydrocarbons, C6, isoalkanes, < 5% n- Hexane	931-254-9	Data not availbl-insufficient			N/A	
Isobutane	75-28-5	Experimental		Photolytic half-life	13.4 days (t	Other methods

3M SprayMount Adhesive.

		Photolysis		(in air)	1/2)	
Non-volatiles	Trade Secret	Data not available or insufficient			N/A	
Non Volatile Compound	Trade Secret	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Pentane	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	Other methods
Pentane	109-66-0	Experimental Biodegradation	28 days	BOD	87 % BOD/ThBOD	OECD 301F - Manometric respirometry
2-methylbutane	78-78-4	Experimental Photolysis		Photolytic half-life (in air)	8.11 days (t 1/2)	Other methods
2-methylbutane	78-78-4	Experimental Biodegradation	28 days	BOD	71.43 % BOD/ThBOD	Other methods
n-hexane	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	Other methods
n-hexane	110-54-3	Experimental Bioconcentration	28 days	BOD	100 % weight	OECD 301C - MITI test (I)
Cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.14 days (t 1/2)	Other methods
Cyclohexane	110-82-7	Experimental Biodegradation	28 days	BOD	77 % BOD/ThBOD	OECD 301F - Manometric respirometry

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	Other methods
Butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	Other methods
Propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	Other methods
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C6, isoalkanes, < 5% n-Hexane	931-254-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	Other methods
Non-volatiles	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non Volatile Compound	Trade Secret	Estimated BCF-Carp	70 days	Bioaccumulation factor	11100	Other methods
Pentane	109-66-0	Estimated Bioconcentration		Bioaccumulation factor	26	Estimated: Bioconcentration factor
2-methylbutane	78-78-4	Experimental Bioconcentration		Log Kow	2.3	Other methods
n-hexane	110-54-3	Estimated Bioconcentration		Bioaccumulation factor	50	Estimated: Bioconcentration factor
Cyclohexane	110-82-7	Experimental BCF-Carp	56 days	Bioaccumulation factor	129	OECD 305E - Bioaccumulation flow-through fish test

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Other adverse effects

Material	CAS Nbr	Ozone Depletion Potential	Global Warming Potential
----------	---------	---------------------------	--------------------------

3M SprayMount Adhesive.

acetone

67-64-1

0

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

- 08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
- 16 05 04* Gases in pressure containers (including halons) containing dangerous substances

EU waste code (product container after use)

- 15 01 04 Metallic packaging

SECTION 14: Transportation information

YP-2080-6050-6, YP-2080-6054-8

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.1, (E), ADR Classification Code: 5F.

IMDG-CODE: UN1950, AEROSOLS, 2.1, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FD,SU.

ICAO/IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

- EUH066 Repeated exposure may cause skin dryness or cracking.
- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H224 Extremely flammable liquid and vapour.

H225	Highly flammable liquid and vapour.
H229	Pressurised container. may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Revision information:

Professional Application of Coatings: Section 16: Annex information was deleted.

Professional Use of Coatings: Section 16: Annex information was added.

Section 1: Product identification numbers information was modified.

Section 01: SAP Material Numbers information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Percent Unknown information was modified.

Label: Graphic information was modified.

Section 5: Fire - Advice for fire fighters information information was modified.

Section 5: Fire - Extinguishing media information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: No PBT/vPvB information available warning information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Bioaccumulative potential information information was modified.

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 15: Chemical Safety Assessment information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

Widespread use by professional workers: Section 16: Annex information was deleted.

Annex

1. Title	
Substance identification	Hydrocarbons, C6, isoalkanes, < 5% n- Hexane; EC No. 931-254-9; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; EC No. 927-510-4;
Exposure Scenario Name	Professional Use of Coatings
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 11 -Non industrial spraying ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Processes, tasks and activities covered	Application of product. Spraying of substances/mixtures.
2. Operational conditions and risk management measures	
Operating Conditions	Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of exposure per day at workplace [for one worker]: 8 hours/day;

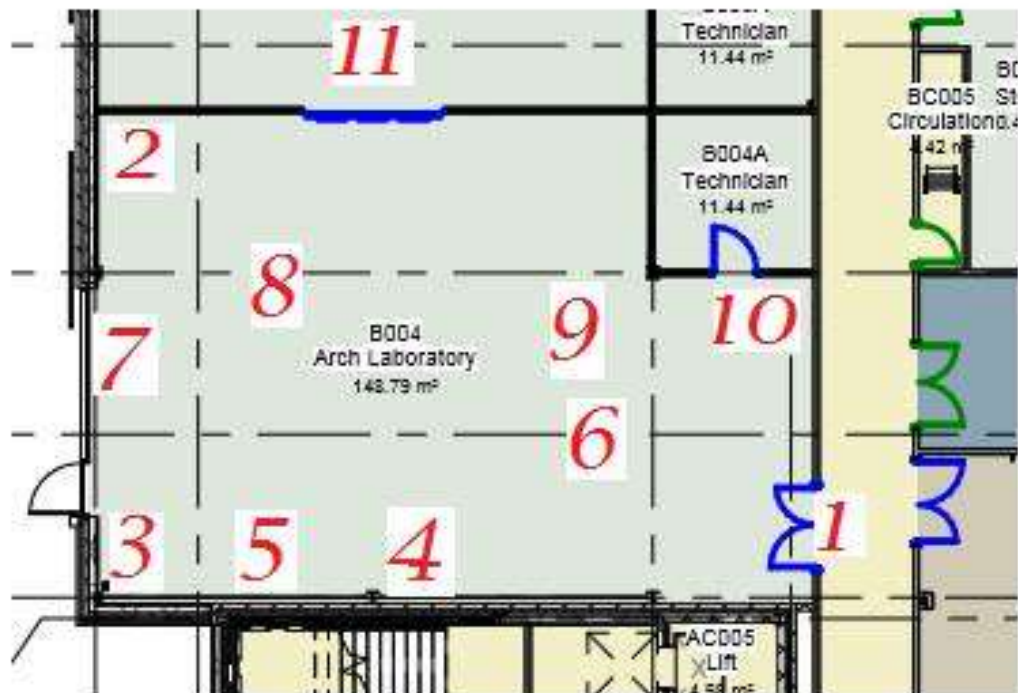
3M SprayMount Adhesive.

	Emission days per year: 365 days/year; Indoor use; Outdoor use;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M United Kingdom MSDSs are available at www.3M.com/uk

Appendix 4 – Floor plan photo locations illustrating potential hazards



Key;

1. Numbers correspond to the photos taken and shown with Appendix 5
2. Helps convey with aid of photos the physical constraints identified within the space along with potential Hazards.

Appendix 5 – Photos



Photo 1 – Architect Laboratory Room 024



Photo 2 – Architect Laboratory Room layout



Photo 3 – Architect Laboratory Room layout



Photo 4 – Architect Laboratory Room showing typical equipment



Photo 5 – Architect Laboratory Room showing typical equipment



Photo 6 – Architect Laboratory Room showing electrical floor power outlet



Photo 7 – Architect Laboratory Room showing typical equipment/materials and glass façade.



Photo 8 – Architect Laboratory Room showing typical working practice and hot glue gun plugged into floor outlet.



Photo 9 – Architect Laboratory Room showing typical chemical's glues ready for use.



Photo 10 – Architect Laboratory Room showing typical student working upon building design model.



Photo 11 – Construction Laboratory showing roller shutter door scenario between both Labs.

Appendix 6 – Brief Overview of Different Approaches that can be adopted for Risk Assessments processes.

The fault tree analysis, method identifies hazards and the sequence of events that led up to or caused the accident. It is a qualitative system that start with accidents and via process of set parameters, diagrammatic descriptions and formula enables us to see how hazards transpired along with the likelihood of them happening without any appropriate management. A top down process that reverse engineers the sequence of events to conclude what led up to the accident.

Hazard and Operating Analysis (HAZOP), method introduced in the late 1960's by Imperial Chemical Industries UK (ICI) and even though it was designed for use in the chemical industry it is a process that is still in use today. It is, deemed a systematic approach in relation to risk assessments and like the fault tree analysis system is a qualitative method that works from a sequence of bottom upwards to conclude control measure that avoid accidents.

Appendix 6 – H&S Advisor UWTSD Supporting Risk Assessment information IQ Building Architectural Lab.

Risk Assessment:

Details:

Description	Risk Assessment for the Architectural Lab and Room 210 – IQ Building, Swansea
Department:	School of Architecture, Built and Natural Environments
Location:	IQ Building, Swansea
Author:	Ian Standen
Line Manager:	
Date:	28 th September 2018
Applicable Equipment:	N/A
Associated Risk Assessment(s):	N/A
Version:	0
Review Date:	27 th September 2019
Approved by:	
Reason for latest update	

Print name: _____

Signed: _____

Authorised by: _____

Print name: _____

Risk Assessment

Ref	Hazard / Task / Activity Area of Concern	Persons at Risk & How	Existing Controls	Describe Any Further Controls / Actions Needed	Actions By Whom	Action By When
1	Slips, trips and Falls (Same Level) - Bags/coats - Trailing cables - Defective flooring	Staff, Students – sprains, fractures	• Floors should regularly inspected for signs of damage or defects which should be reported online using Quantarc to raise a job request • Floor boxes slightly raised – these need to be repaired • All walkways should be kept clear of obstructions – bags and coats to be stored away appropriately • Leads should not trail across walkways – cable covers to be used • Liquid spillages to be cleared immediately and area made safe until floor has dried	• Floor boxes to be repaired by Kier	Kier	01/11/18
2	Hot/cold Liquids (drinks) - Scalds/burns - Spillage	Staff/Students – scalds/burns	• Hot liquids to be kept in sealed containers to avoid spillages – use covers on takeaway cups • User to be vigilant and careful when walking/moving around with hot liquids • Spillages must be cleaned immediately and reported to Lecturer • All incidents must be reported to the Health and Safety Department	• No further action required	N/A	N/A

3	Ergonomics - Sitting long periods - Standing long periods	Staff/ Students – aches, strains, cramps	• Tables provided are adjustable (height) and can be easily moved (on wheels) • Chairs and desks provided – users to be made aware of how to adjust chairs to be comfortable for their individual use • Good lighting levels in room • Temperature of room to be monitored in room and adjusted as required	• Workstation guidance document to be provided	Manager	As required
4	Manual Handling - Chairs/tables - IT Equipment - Training Materials	Staff/ Students - musculoskeletal injuries, sprains, strains	• Staff to be provided instruction and training in manual handling techniques • Correct manual handling techniques to be used when moving any items/equipment • Assistance to be requested when moving larger/heavier items • Tables are easily moveable (on wheels) - Use mechanical aids (trolleys) for other items if available to move items	• Manual Handling Training to be arranged	Manager	01/11/18
5	Fire	Staff/ Students- Entrapment, burns, scalds, inhalation of smoke	• Fire Risk Assessment available for building • Staff/Students to be aware of the fire evacuation procedures for the building • Fire exits, extinguishers, and alarms must be kept clear at all times • Fire Alarm is tested weekly – Staff/students to be made aware of the time and day testing is carried out • All electrical appliances to be switched off at the end of each day • Staff/Students with disabilities must have a Personal Emergency Evacuation Plan (PEEP) in place	• Fire Procedure to be briefed to all staff/students	Manager	01/11/18

6	Electricity - Damage leads - Trailing leads - Overloading sockets	Staff/ Students	• All mains powered portable electrical appliances to be in good working order and tested for electrical safety • Leads should be visually inspected for damage prior to use – damaged leads must not be used and removed from service until repaired or replaced • Avoid trailing leads around the edges of furniture or equipment as this can cause damage to the lead • Each item of equipment to have its own 240v socket – do not overload sockets	• No further action required		
7	Use of Hand tools - Utility knife	Students – cuts	• Where possible eliminate the need to use utility knives • Where utility knives are used (making models), these should be the correct type for task and used with care by a competent person • Consider using concealed blades or automatic retractable blades • Check the blade prior to use to ensure it is secure and sharp (this will allow • Gloves to be worn when • Always cut away from the body and never rest item cutting on leg to cut • Ensure all utility knives are stored away when not in use			

8	Noise (Adjacent room use (Room 023, Construction Workshop))	Staff/Students – Temporary hearing loss, tinnitus, headache	- Noise levels are excessive when equipment is being used in adjacent room 023 (Construction Workshop) - Shutter door remain closed – this does not offer much noise reduction Room could not be used for lectures/teaching due to unscheduled noise levels (this is due to machinery being used ad-hoc in adjacent room)	Noise assessment required to establish noise levels when machinery in use		
9	Pre-Existing Medical Conditions	Students – illness,	- Students with medical conditions (epilepsy, diabetic or mobility concerns etc.) should have declared this to Student Support Services so the appropriate communication to staff is conducted - PEEPS to be put in place and communicated to staff members and student - First Aid kits and staff trained in First Aid should be readily available - Any Ill-health incidents to be reported to the Health and Safety Department			

Work activity being assessed: :		Location:	Assessment No:
Assessor:	Signed:	Date prepared:	Review date:
I have read and understand the requirements of this risk assessment.			
Name	Signature		Date