

GREIG WESTER 1804348
1804348
13/5/2022
MATERIALS + SUSTAINABILITY
ACHA 6012

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1b) PRACTICALITIES:

HYDROGEN IS VERY DIFFICULT TO STORE DUE TO IT'S DENSITY. NOT ONLY WILL IT SEEP PAST SEALS BUT IT MUST ALSO BE STORED AT VERY HIGH PRESSURES (300 - 450 BAR ACCORDING TO ACSET GLOBAL) TO ACCOUNT FOR IT'S LOW DENSITY. ~~W~~ WITHOUT THE NEED FOR EXCESSIVELY FREQUENT REFUELLING. HYDROGEN ALSO PRODUCES APPROXIMATELY 20% LESS POWER COMPARED TO PETROL WHEN TESTED IN AN ASTON MARTIN.

BIOETHANOL CAN HAVE DETRIMENTAL EFFECTS ON THE FUEL LINES IF NOT DESIGNED FOR THE FUEL. COMPONENTS CAN CORRODE OR BE EATEN AWAY CAUSING EXTRA COST IN REPLACEMENT DUE TO IT'S LOWER SPECIFIC ENERGY CONTENT. ONE MUST ALSO CARRY MORE FUEL FOR THE SAME POWER REQUIREMENTS.