



Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME:

Fuel Doctor

RECOMMENDED USE:

Fuel Treatment

SUPPLIER DETAILS:

Company:	Fuel Doctors Australia Pty Ltd
Address:	30 Rosa Street, Richlands, Qld 4077, Australia
Telephone Number:	(+61-7) 3217 0077
Facsimile Number:	(+61-7) 3375 4400
Emergency Telephone No:	(+61-7) 3217 0077 (Office Hours) (+61-4)12 211 777 (After Hours)

SECTION 2: HAZARDS IDENTIFICATION

Not currently classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **NON-DANGEROUS GOODS**.

This product is classified as hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE**.

Classification of the substance or mixture:

Serious eye damage/eye irritation: Cat. 1

SIGNAL WORD: DANGER



Hazard Statement(s):

H318 Causes serious eye damage.

Precautionary Statement(s)

Prevention

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

Storage

No storage statements.

Disposal

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

Poisons Schedule (SUSMP)

S5 CAUTION



SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL/COMPONENT	CAS Number	Proportion
2-(2-butoxyethoxy) ethanol	112-34-5	>30%<60%
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched	69011-36-5	>10%<30%
Alcohols, C12-14, ethoxylated	68439-50-9	>10%<30%
Ingredients not classified as hazardous		to 100%

SECTION 4: FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone e.g. Australia 131 126; New Zealand 0 800 764766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical attention.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. If vomiting occurs give further water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Water jet.

Specific hazards arising from the substance or mixture:

Combustible liquid.

Special protective equipment and precautions for fire-fighters:

On burning will emit toxic fumes, including those of oxides of carbon. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray. If safe to do so, remove containers from path of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water. High risk of slipping due to leakage/spillage of product. Forms slippery surfaces with water.

SECTION 7: HANDLING AND STORAGE

Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant



regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour. When using do not eat, drink or smoke. Wash hands before breaks and at the end of the work day. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Store away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

No value assigned for this specific material by Safe Work Australia.

Engineering Controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual Protection Measures, for example Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Range (C):	>230	Melting Point(C):	Not determined
VAP Press(hPa):	<0.1	Odour:	Faint
Specific Gravity:	0.93 -0.95	VAP Density:	Not determined
Sol In Water (g/l):	Dispersible	Appearance:	Green Liquid
pH:	6.0 – 7.5	Evaporation Rate:	Not determined
Flash Point (C) (Closed cup):	>100	Density (g/L):	0.94 – 0.95

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

No information available

Chemical stability:

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions:

Contact with aluminium or alloys containing aluminium may result in alcoholate formation with subsequent evolution of hydrogen.

Conditions to avoid:

Oxidising agents, excessive heat will lead to accelerated oxidative degradation,

Incompatible materials:

Incompatible with aluminium and alloys, copper , copper alloys , neoprene ,natural rubber , oxidising agents , acids , alkalis, halogens, reactive chemicals.

Hazardous decomposition products:

Toxic fumes of carbon oxides on combustion or oxidation.



SECTION 11: TOXICOLOGY INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Toxicity/Effects

Oral

LD50 (rat) > 4,000 mg/kg Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs.

Irritation / corrosion

Assessment of irritating effects: Risk of serious damage to eyes. Not irritating to the skin.

Inhalation:

Breathing in mists or aerosols may produce respiratory irritation.

Skin

LD5 (rat) >2000mg/kg. Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Eye

Species: rabbit Result: Severe Irritant. Method: OECD Guideline 405. Contamination of eyes can result in permanent injury

Sensitization

Assessment of sensitization: No data available.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

Genetic toxicity

Assessment of mutagenicity: No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Avoid contaminating waterways.

Toxicity

Toxicity to fish	LC50 (96 h) 4 - 40 mg/l, <i>Leuciscus idus</i>
Aquatic invertebrates	EC50 (48 h) 0.4- 4 mg/l, <i>Daphnia magna</i>
Aquatic plants	EC50 (72 h) 0.4 - 4 mg/l (growth rate), <i>Scenedesmus subspicatus`</i>

Microorganisms/Effect on activated sludge

Toxicity to microorganisms	bacterium/EC10 (16 h): > 10,000 mg/l
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Persistence and degradability

Elimination information

>= 90 % Bismuth-active substance (mod. OECD 303A)
90 - 100 % DOC reduction (OECD 301 A (new version)) (aerobic, activated sludge, domestic).
Readily biodegradable.

Mobility in soil

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.



SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Not currently classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

Marine Transport:

Not currently classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport:

Not currently classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

SECTION 15: REGULATORY INFORMATION

This product is classified as hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE**.

Classification of the substance or mixture:

Serious eye damage/eye irritation: Cat. 1

Hazardous to the aquatic environment - acute: Cat. 2

Hazardous to the aquatic environment - chronic: Cat. 3

SIGNAL WORD: DANGER



Hazard Statement(s):

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

H401 Toxic to aquatic life.

Standard Uniform Schedule of Medicine and Poisons

Schedule 5

Australia inventory (AICS): All components are listed or exempted.

SECTION 16: OTHER INFORMATION

Abbreviations

ACGIH - American Conference of Industrial Hygienists.

ADG - Australian Dangerous Goods.

atm Atmosphere

BEI - Biological Exposure Index/Indices.

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CNS - Central Nervous System.

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C C Degrees Celsius

g Grams

g/cm² Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IARC - International Agency for Research on Cancer.

IDLH Immediately Dangerous to Life and Health

Immiscible Liquids are insoluble in each other.

kg Kilogram

kg/m³ Kilograms per Cubic Metre

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram



mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m3 Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Health and Safety Commission
NOS Not Otherwise Specified.
OECD Organisation for Economic Co-operation and Development
PEL Permissible Exposure Limit
Pa Pascal
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
RCP Reciprocal Calculation Procedure
RTECS - Registry of Toxic Effects of Chemical Substances.
STEL Short Term Exposure Limit
STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)
SWA - Safe Work Australia.
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight

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