



Safety Data Sheet

Section 1: Identification of the material and supplier

Product name:	BIOETHANOL FIREPLACE FUEL
Other names:	ETHANOL FIREPLACE FUEL
Product Codes/Trade Names:	EFF
Primary use/uses:	FUEL FOR INTERNAL AND EXTERNAL ETHANOL FIREPLACES
Supplier:	PRECISION MANAGEMENT (AUST) PTY LTD
Address:	UNIT 4 / 97 FAIREY RD, SOUTH WINDSOR NSW 2756
Telephone:	02 8064 2333
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Facsimile:	02 8064 7813
Emergency phone number:	

This Safety Data Sheet (SDS) is issued by the Supplier in accordance with National Standards and Guidelines from Safe Work Australia (SWA – formerly ASGC/NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its SDS by any other person or organization. The Supplier will issue a new SDS when there is a change in product specifications and/or Standards, Codes, Guidelines, or Regulations.

Section 2: Hazard identification

This material is hazardous according to criteria of Safe Work Australia.



Signal Word

Danger

Hazard Classification

Flammable liquids – Category 2
 Serious Eye Damage/Irritation – Category 2A

Hazard Statement(s)

H228 – Highly flammable liquid and vapour
 H337 – Causes eye irritation

Prevention Precautionary Statement(s)

P103 – Keep out of reach of children.
 P103 – Read label before use.
 P231 – Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233 – Keep container tightly closed.
 P240 – Ground/bond container and receiving equipment.
 P241 – Use explosion-proof electrical, ventilating, lighting and all other equipment.
 P242 – Use only non-sparking tools.



PPE for First Aiders: Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

Section 5: Fire fighting measures

Hazchem Code: •2YE

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam, water fog (or if unavailable fine water spray), foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

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

Section 6: Accidental release measures

Emergency Procedure: Shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust or vapours. Work up wind or increase ventilation.

Containment Procedure: If safe to do so, isolate the leak. Small spills are allowed to evaporate provided there is adequate ventilation. Contain – prevent run off into drains and waterways. If contamination of sewers or waterways has occurred advise local emergency services.

Clean Up Procedure: Cover with damp absorbent (inert material, sand or soil). Collect and seal in properly labelled containers or drums for disposal. Use a spark-free shovel.

Dangerous Goods – Initial Emergency Response Guide No: 14

Section 7: Handling and storage

Handling: Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

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

This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.



Section 8: Exposure controls / Personal protection

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia.

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m ³	ppm	mg/m ³		
Ethanol	1000	1880	-	-	-	-
Isopropyl Alcohol	400	983	500	1230	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute period, which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. 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.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9: Physical and chemical properties

Appearance:	Clear colourless liquid Cleansol TG Products - clear yellow liquid
Odour:	Characteristic alcohol odour. Ethanol odour detectable at 80 - 100 ppm
pH, at stated concentration:	Not available

Vapour Pressure:	4.4 - 5.9 kPa @ 20°C
Vapour Density (air=1):	1.59 - 2.1
Boiling Point/range (°C):	78 - 82.4
Freezing/Melting Point (°C):	-89 - -117
Solubility:	Complete
Specific Gravity:	0.8
FLAMMABLE MATERIALS	
<input type="checkbox"/> Flash Point (°C):	12 -13
<input type="checkbox"/> Flash Point Method:	Tag closed cup
<input type="checkbox"/> Flammable (Explosive) Limit - Upper:	12 - 19%
<input type="checkbox"/> Flammable (Explosive) Limit - Lower:	2.0 - 3.5%
<input type="checkbox"/> Autoignition Temperature (°C):	392 - 399
ADDITIONAL PROPERTIES	
<input type="checkbox"/> Evaporation Rate:	2.3 - 2.53 (n-Butyl Acetate = 1)
<input type="checkbox"/> Molecular Weight:	Not available
<input type="checkbox"/> Volatile Organic Compounds Content (VOC): (as specified by the Green Building Council of Australia)	100%
<input type="checkbox"/> % Volatiles:	100%

Section 10: Stability and reactivity

Reactivity: No reactivity hazards are known for the material.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: No known hazardous reactions.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Carbon monoxide and carbon dioxide.

Section 11: Toxicological 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 Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.



Skin contact: 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.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: An eye irritant.

Acute toxicity

Inhalation: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as a Category 2A Hazard (reversible effects to eyes).
Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser.
Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

Section 12: Ecological information

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous.
Chronic toxicity estimate (based on ingredients): >100 mg/L

Ecotoxicity: No information available.

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential: No information available.

Mobility: No information available.

Safety Data Sheet



ETHANOL FIREPLACE FUEL

Section 13: Disposal considerations

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

Section 14: Transport information

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land",

UN No: 1170
Dangerous Goods Class: 3 Flammable Liquid
Packing Group: II
Hazchem Code: •2YE
Emergency Response Guide No: 14

Proper Shipping Name: ETHANOL

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 1170
Dangerous Goods Class: 3 Flammable Liquid
Packing Group: II

Proper Shipping Name: ETHANOL

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1170
Dangerous Goods Class: 3 Flammable Liquid
Packing Group: II

Proper Shipping Name: ETHANOL

Section 15: Regulatory information

HSNO Approval Number and/or Group Standard: Solvent (Flammable) Group Standard 2006, HSR002650



Safety Data Sheet

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Organic solvents excluding halogenated solvents

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex II - Noxious Liquid Substances carried in Bulk

This material/constituent(s) is covered by the following requirements:

- All the constituents of this material are listed on the *Australian Inventory of Chemical Substances (AICS)*.

Section 16: Other information

For further information on this product, please contact:

Additional Information

Australian Standards References:

AS 1020	The Control of Undesirable Static Electricity.
AS 1076	Code of Practice for selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres (other than mining applications) – Parts 1 to 13
AS/NZS 1336	Recommended Practices for Occupational Eye Protection
AS/NZS 1715	Selection, Use and Maintenance of Respiratory Protective Devices
AS/NZS 1716	Respiratory Protective Devices
AS 1940	The Storage and Handling of Flammable and Combustible Liquids
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)
AS 2380	Electrical equipment for explosive atmospheres – Explosion Protection Techniques (Parts 1 to 9)
AS 3000	Electrical installations (known as the Australian/New Zealand Wiring Rules).

Other References:

Safe Work Australia, 10 August 2011.	Preparation of Safety Data Sheets for Hazardous Material, Code of Practice.
Safe Work Australia, 10 August 2011.	Labelling of Workplace Hazardous Chemicals, Code of Practice.
WES	Workplace Exposure Standards for Airborne Contaminants, December 2011, Safe

Safety Data Sheet



	Work Australia.
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, National Transport Commission.
European Chemicals Agency	http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances

Authorisation

Reason for Issue: Revised. Change to transport information.

Authorised by:

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END OF SDS