SAFETY DATA SHEET

TECHNICAL GRADE ETHANOL

Infosafe No.: LQA79
ISSUED Date: 21/04/2020
ISSUED by: UNITED PETROLEUM PTY LTD

1. IDENTIFICATION

GHS Product Identifier

TECHNICAL GRADE ETHANOL

Company Name

UNITED PETROLEUM PTY LTD

Address

600 Glenferrie Road Hawthorn Vic 3122 AUSTRALIA

Telephone/Fax Number

Tel: (03)9413 1400 Fax: (03)9413 1401

Emergency phone number

1300 131 001

Recommended use of the chemical and restrictions on use

General solvent

Other Names

Name	Product Code
TECHNICAL GRADE ETHANOL-DENATURED	
DENATURED TECHNICAL GRADE ETHANOL	
TGE	

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Flammable Liquids: Category 2 Eye Damage/Irritation: Category 2A

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary Statement (s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Pictogram (s)

Exclamation mark, Flame



Precautionary statement - Prevention

P210 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/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash contaminated skin thoroughly after handling.

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

Precautionary statement - Response

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam, water fog or water mist (Alcohol resistant foam is preferred. If not available fine water spray/mist can be used.) for extinction.

Precautionary statement - Storage

P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary statement - Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Other Information

This product contains Ototoxic substances. Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Ethanol	64-17-5	>80 %
Ingredients determined not to be hazardous, including water.		Balance

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone 131 126 in Australia) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use Carbon dioxide, dry chemical, foam, water fog or water mist. Alcohol resistant foam is preferred. If not available fine water spray/mist can be used.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific Hazards Arising From The Chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code

•2YE

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. Protect from freezing.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Ethanol

TWA: 1000 ppm, 1880 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eighthour working day, for a five-day week.

Source: Safe Work Australia

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as neoprene or PVC. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Slightly cloudy
Colour	Not available	Odour	Recognisable alcohol and amyl alcohol odour
Decomposition Temperature	Not available	Melting Point	-120 °C
Boiling Point	80.0 °C	Solubility in Water	Partly
Specific Gravity	0.85 (20 °C) (H2O = 1)	рН	Not available
Vapour Pressure	4kPa (20 °C)	Vapour Density (Air=1)	2.0 (20 °C)
Evaporation Rate	2.2 (BuAC = 1)	Odour Threshold	Not available
Viscosity	Not available	Partition Coefficient: n- octanol/water	Not available
Flash Point	20 °C(Abel Closed Cup)	Flammability	Highly flammable liquid
Auto-Ignition Temperature	370 °C	Flammable Limits - Lower	Not available
Flammable Limits - Upper	Not available	Explosion Limit - Upper	19%
Explosion Limit - Lower	3.3%	Molecular Weight	40

Other Information

Volatiles 80%

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials.

Conditions to Avoid

Heat, open flames and other sources of ignition. Protect from freezing.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Possibility of hazardous reactions

Reacts with incompatible materials.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material.

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling. no EUH066 statement on dossier, hence unsure whetehr this needs to be in pl confirm. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

Other Information

This product contains Ototoxic substances. Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

Occupational exposure in excess of the limits may increase the risk for persons with pre-existing symptoms. Occupational exposures will add to overall exposures from ingestion of drinks containing alcohol and any health effects resultingfrom such exposures. Ethanol exposure can interfere with absorption of drugs. Although it is not classified as carcinogenic, ethanol is known to be toxic to the male reproductive system and may result in foetal alcohol syndrome in newborns if ingested during pregnancy.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No ecological data available for this material. The available ecological data for the ingredients is given below:

Persistence and degradability

Degree of elimination: 94% Evaluation: biodegradable

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Fish

LC50(Rainbow trout)(fish): 12900 - 15300 mg/L/96h

Acute Toxicity - Bacteria

EC50 (Phytobacterium phosphoreum): 34900mg/L/5-30min

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1: Explosives
- Division 2.1: Flammable Gases.

(Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

- Division 2.3: Toxic Gases
- Division 4.2: Spontaneously Combustible Substances
- Division 5.1: Oxidising substances
- Division 5.2: Organic Peroxides
- Class 6: Toxic or Infectious Substances

(where the flammable liquid is nitromethane)

- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

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

Class/Division: 3 UN No: 1170

Proper Shipping Name: ETHANOL SOLUTION

Packing Group: II EMS: F-E, S-D

Special Provisions: 144

Air Transport (ICAO/IATA):

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

Class/Division: 3 UN No: 1170

Proper Shipping Name: ETHANOL SOLUTION

Packing Group: II

Packaging Instructions (passenger & cargo): 353 Packaging Instructions (cargo only): 364

Hazard Label: Flammable Liquid

Special Provisions: A3, A58, A180

U.N. Number

1170

UN proper shipping name

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Transport hazard class(es)

3

Packing Group

Ш

Hazchem Code

•2YE

IERG Number

14

IMDG Marine pollutant

No

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

Not Scheduled

Australia (AICS)

All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS created: April 2020

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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