

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

SECTION 1. Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification as on the label/Trade name: **ETHANOL**

Additional Trade names: Ethanol (Industrial, Absolute or Light Spirits, Extra Neutral Potable, Neutral Potable, Rectified Extra Neutral and High Purity Extra Neutral Potable Alcohol).

1.2 Relevant identification uses of the substance and uses advised against:

Identified uses: Raw materials in the manufacture of pharmaceuticals, cosmetics, alcoholic beverages, toiletries, homecare products, industrial products, essences, as an intermediate in chemicals manufacture such as esters and acrylates and vinegar (acetic acid).

Uses advised against: Only for use as a raw material.

1.3 Details of the supplier of the Safety Data Sheet:

AlcoNCP (Pty) Ltd
121 Sea Cow lake Road,
Durban, 4001,
SOUTH AFRICA

Telephone: +27 (31) 560 1111

Cell: +27 (82) 850 9660

1.4 Emergency telephone number:

+ 27 (31) 579 2004

SECTION 2. Hazard identification

2.1 Classification of the substances or mixture: The mixture is classified according to:

Regulation for HCA, 2021, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard class	Hazard statement
Flammable liquid (Category 2)	H225
Eye irritation (Category 2)	H319

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects:

Highly flammable liquid and vapour.

The most important adverse human health effects:

Causes serious eye irritation.

2.2 Label elements:

Hazard pictograms:



Signal Word: DANGER

Hazard Statements: H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

Precautionary Statements:

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

P102 Keep out of reach of children.

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+P265 Wash hands thoroughly after handling. Do not touch eyes.

P280 Wear protective gloves / protective clothing / eye protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or 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+P317 If eye irritation persists: Get medical help.

P370 + P378 In case of fire: Use powder, alcohol-resistant foam, lots of water, carbon dioxide for extinction.

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

Special labelling of certain mixtures: None known.

Other hazards: None known.

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance/Mixture:

Substance name	CAS-No.	Concentration % by weight	Classification EC1272/2008
	EC-No.		
Ethanol [ethyl alcohol]	64-17-5	75.0-99.9%	Flammable liquids (Category 2) H225. Eye irritation (Category 2) H319.
	200-578-6		

There are no additional ingredients present which, within the current knowledge of the provider of this SDS, and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

General Advice: Have the product container or label with you when calling a poison control centre or doctor or going for treatment.

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. Seek medical attention if irritation persists.

In case of ingestion: Never give anything by mouth if victim is losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 ml. Of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Avoid mouth-to-mouth contact by using mouth guards or shields. Obtain medical advice immediately.

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

Inhalation: Intoxicating if continuously inhaled for a long period of time. May cause respiratory tract irritation.

Ingestion: Large doses lead to alcohol poisoning while repeated ingestion can lead to alcoholism. Alcohol abuse and dependence can have a profound effect on work performance and tendency to accidents at work.

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

The presence of denaturants, e.g. Methanol, pyridines, and benzene in industrial alcohol greatly increase the toxicity on ingestion. Ethanol drinking is also suspected of increasing the toxic effect of other chemicals encountered in the laboratory and the workplace by inhibition of their metabolism or excretion; e.g. 1, 1, 1-Trichloroethane, Xylene, Trichloroethylene and Dimethylformamide, Benzene and Lead. May cause harmful central nervous system effects. Effects may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death. Severe acute intoxication may cause Hypoglycaemia, Hypothermia and extensor rigidity. Prolonged or frequent contact may result in liver injury.

Skin Contact: Repeated or prolonged contact may result in defatting, redness, pain, itching, inflammation, cracking and possible secondary infection. Repeated skin contact may result in allergic skin reaction in a very small proportion of individuals.

Eye Contact: Moderately irritating. Exposure to liquid, vapours, fumes or mist may cause irritation. Direct contact may cause irritation, redness, pain, corneal inflammation and possible corneal damage.

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

The severity of the symptoms described will vary on the concentration and the length of exposure.

SECTION 5. FIRE -FIGHTING MEASURE

5.1 Extinguisher media:

Suitable extinguisher media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the product:

Dangerous when exposed to heat or flame. Vapours form flammable or explosive mixtures with air at room temperature. Vapour or gas may spread to distant ignition sources and flash back. Run – off to sewer may cause fire or explosion hazard. Containers may explode in heat of fire. Vapours may concentrate in confined areas, and are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. Irritating or toxic substances may be emitted upon thermal decomposition. Hazardous composition products such as carbon oxides may form.

5.3 Advice for fire-fighters:

Evacuate all persons from the fire site. Fight fire from a protected location. Use water spray to cool containers exposed to fire. Keep adequate measures to prevent environmental contamination. Dike fire control water for later disposal according to local laws. Depending on fire location it is preferable not to use water to prevent the risk of environmental contamination; if not possible use spray water consciously. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Act in accordance with

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

the site's Internal Emergency Plan and the Workplace Specific Procedures for actions to be taken after an accident or other emergencies.

SECTION 6. ACCIDENTAL RELEASE

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation and contact with skin.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental precautions:

Prevent spillage if safe to do so. Do not allow the spilt product to enter water courses and drains and avoid contact with soil. Do not allow the spilt product to spread to other areas - keep the spilt material contained and isolated. Report spills and releases as required to appropriate authorities if the spilt product has caused environmental pollution (sewers, water ways, soil, or air).

6.3 Methods for containment and cleaning up:

Eliminate all sources of ignition and static; restrict access to area until completion of clean-up procedure.

For small spills: Collect in suitable and properly labelled containers using absorbent material such as, sand, diatomite or universal binders. Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

For large spills: Dike area to contain spill, dilute with water, pump into suitable and properly labelled containers. Incineration is the recommended method of disposal or dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

6.4 Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

Never return spills to original containers for re-use.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Always provide good ventilation in the work area. Avoid the formation of vapours/mists. Do not breathe in vapours/mist. Wear protective clothing and equipment during handling as described in Section 8 of the SDS. Wash the hands and face thoroughly with water after handling. Keep containers closed when not in use. Do not permit smoking in use or storage areas. Locate emergency showers and eye-rinsing facility near the work/handling area. Remove contaminated clothing immediately if the product gets inside. Contaminated work clothing should not be allowed out of the workplace. Work clothes should be separately laundered. Launder contaminated clothing before re-use. Keep unprotected persons away from the area where the product is being applied.

Protective measures: Observe all information provided by the manufacturer.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product. Regular cleaning of work area and work clothing is recommended. Maintain good normal industrial hygiene and housekeeping practices in areas where the product is used/handled.

7.2 Conditions for safe storage, including incompatibilities:

Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Store in approved flammable liquid storage containers. Keep containers tightly closed as this material readily absorbs moisture. Store away from incompatible materials (see Section 10.5). Store in a cool, dry well-ventilated area away from sparks, flames and other sources of ignition. Eliminate all sources of static electricity. Use non-sparking electrical and ventilation systems. Storage criteria: Flammable Liquid store.

7.3 Specific end uses:

Ethanol is not corrosive to metals and may be stored in stainless steel, mild steel or aluminium containers. Ethanol may also be stored in HDPE containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Occupational exposure limits (OEL):

South Africa Regulation for HCA, 2021

Ethanol [ethyl alcohol] (CAS 64-17-5) OEL-RL STEL/C 2000 ppm

Biological exposure indices (BEI): None known.

Additional exposure limits under the conditions of use: None known.

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

8.2 Exposure control:

A Risk Assessment should be conducted before handling is to commence to determine specific exposure control. Ensure that eyewash stations and safety showers are close to the workstation location.

Appropriate engineering controls: General methods include mechanical ventilation (dilution and local exhaust), process or personnel enclosure, control of process conditions and process modification (e.g. substitution of a less hazardous material). Administrative controls and personal protective equipment may also be required. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside. Supply sufficient replacement air to make up for air removed by exhaust system.

Hygiene measures: Wash hands, forearms and face thoroughly after handling material, before eating, smoking and using the lavatory and at the end of the working period.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear tight chemical safety goggles, refer to the recommendations in the Risk Assessment.

Hand protection: Chemical-resistant impervious gloves complying with an approved standard should always be worn when handling this product. Examples of preferred glove barrier materials include butyl rubber and neoprene. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Body protection: Choose body protection in relation to its type, to the concentration and quantity of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: If required as indicated in the Risk Assessment, use a properly fitted, particulate filter respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance (form) : Liquid.

Colour : Colourless.

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

Odour	: Characteristic pleasant odour.
Odour threshold	: No information not determined.
pH (at concentration)	: 7,0 at 10 g/l at 20 °C.
Melting point/freezing point (°C)	: -114,0 °C at 1.013,25 hPa.
Boiling point/range (°C)	: -130°C-112°C.
Flash point (°C)	: 12°C-17°C (closed cup).
Evaporation rate	: No information not determined.
Flammability (solid, gas)	: Not applicable liquid.
Ignition temperature (°C)	: No information not determined.
Upper/lower flammability/explosive limits	: Upper explosion limit: 27.7 % (V). Lower explosion limit: 3.1 % (V).
Vapour pressure (20°C)	: 59 mm Hg.
Vapour density	: No information not determined.
Density at 25°C	: 785.3 kg/m ³ -809 kg/m ³ .
Water solubility (g/l) at 20°C	: Miscible with water in all proportions.
n-Octanol/Water partition coefficient	: No information not determined.
Auto-ignition temperature	: 363-425 °C at 1013 hPa.
Decomposition temperature	: Distillable in an undecomposed state at normal pressure.
Viscosity Kinematic	: No information not determined.
Viscosity Dynamic	: 1.2 mPa/s at 20°C.

9.2 Other information:

Physical hazards:

Explosive properties: Vapours can form explosive mixtures with air. All sources of ignition or static must be excluded.

Oxidising properties: None.

Other:

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

Fat solubility (solvent-oil to be specified): No information not determined.

Bulk density: No information not determined.

Dissociation constant in water (p Ka): No information not determined.

Oxidation-reduction potential: No information not determined.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

Stable under recommended storage conditions.

10.2 Chemical stability:

Ethanol is a flammable liquid whose vapours can form ignitable and explosive mixtures with air at normal room temperatures. Thus, an aqueous mixture containing 30% ethanol can produce a flammable mixture of vapour and air at 29°C, and even one containing only 5% alcohol can produce a flammable mixture at 62°C.

10.3 Possibility of hazardous reactions:

Reacts with the following substances, strong acids, strong bases and oxidizing agents. Release of hydrogen fluoride is possible during reactions.

10.4 Conditions to avoid:

Overheating, flames, sources of ignition or static electricity. Oxidizing agents. Vapour/ air mixtures are explosive. Keep away from heat and sources of ignition.

10.5 Incompatible materials:

Ethanol reacts vigorously with a wide range of oxidizing materials and other chemicals e.g. disulphuryl difluoride, silver nitrate, bromine pentafluoride, potassium perchlorate, nitrosyl perchlorate, chromyl chloride, chloryl perchloride, uranyl perchlorite, chromium trioxide, fluorine nitrate, dioxygen difluoride, uranium hexafluoride, iodine heptafluoride, tetra chlorosilane, permanganic acid, nitric acid, hydrogen peroxide, peroxodisulphuric acid, potassium dioxide, sodium peroxide, potassium permanganate, ruthenium (VIII) oxide, platinum, potassium, potassium *tert* - butoxide, silver oxide and sodium.

10.6 Hazardous decomposition products:

Thermal decomposition or combustion products may include the following substances: sulphur oxides, hydrogen fluoride.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution:

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

Non-human toxicological data: No relevant information available.

11.2 Information on toxicological effects: Ethanol

Acute toxicity:

Acute toxicity oral LD₅₀ for rat 7 060 mg/kg (literature value).

Acute inhalation LC₅₀ (4hr) for rat 66 000 mg/L (literature value).

Acute dermal LD₅₀ for rabbit 20 000 mg/kg (literature value).

Skin corrosion/irritation:

Repeated or prolonged contact may result in defatting, redness, pain, itching, inflammation, cracking and possible secondary infection. Repeated skin contact may result in allergic skin reaction in a very small proportion of individuals.

Serious eye damage/irritation:

Moderately irritating. Exposure to liquid, vapours, fumes or mist may cause irritation. Direct contact may cause irritation, redness, pain, corneal inflammation and possible corneal damage.

Respiratory or skin sensitization: Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Ethanol has been found to be non- mutagenic in the Salmonella microsome test, but some transient mutagenic changes have been observed in male, but not female, mice treated with rather large doses. Ethanol is mutagenic in man via its first metabolite, Acetaldehyde. Acetaldehyde induces chromosomal aberrations, sister-chromatid exchanges and cross-links between DNA strands.

Carcinogenicity:

Long-term consumption of alcoholic beverages demonstrates an increase in the occurrence of breast cancer and colorectal cancer. Malignant tumours of the oral cavity, pharynx, larynx, oesophagus and liver is also causally related to the consumption of alcoholic beverages. Some studies have shown an excess incidence of laryngeal cancer over the expected from exposure to synthetic alcohol, with diethyl sulphate probably being the causative agent.

Reproductive toxicity:

Some evidence of fetotoxicity and teratogenicity has been observed in experimental animals treated with high doses of ethanol during gestation. Alcohol may induce spontaneous abortions, may impair fertility, may cause harm to the unborn child and may cause harm to breast fed babies. The reproductive hazards have been determined after repeated excessive consumption of ethanol; these effects are not likely to occur through exposure below the Occupational Exposure Limits in the working environment (see section 8).

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

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

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

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

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicological data:

Fish: LC₅₀ (96 hrs) for *Pimephales promelas* 15.3 mg/L.

Daphnia: EC₅₀ (48 hrs) for *Ceriodaphnia dubia* 5012 mg/L.

12.2 Persistence and degradability:

This product is readily biodegradable. Ethanol is widely recognized as being readily biodegradable in the environment as it is both a metabolite of and nutrient for microbes.

12.3 Bioaccumulative potential:

This product is not expected to bioaccumulate through the food chains in the environment. The very low log KOW of -0.31 is indicative of a low bioaccumulation potential.

12.4 Mobility in soil:

This product is likely to volatilize rapidly into the air because of its high vapour pressure. The product is poorly absorbed onto soils or sediments. Adsorption coefficient (KOC) solid phase/liquid phase = 1 (highly mobile).

12.5 Results of PBT& vPvB assessment:

No further relevant information available.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Treat as hazardous waste and do not dispose of the product as general waste. Dispose product related waste and packaging in accordance with all local, provincial, and national regulations e.g., the Waste Classification and Management Regulations (GN 634 of 2013), R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill. Prevent the contamination of water, food, or feed by storage or disposal of the waste.




Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

13.2 Product/ packaging disposal:

Treat contaminated packaging as hazardous waste as dispose of as required by the legislation. Do not reuse or refill containers as they may contain flammable and hazardous residues.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	1170	1170	1170
UN Proper shipping name:	ETHANOL (ETHYL ALCOHOL)	ETHANOL (ETHYL ALCOHOL)	ETHANOL (ETHYL ALCOHOL)
Transport hazard class:	3	3	3
Hazard symbol:			
Packaging group:	II	II	II
Marine pollutant:	No	No	No
Special precautions for user:	Flammable liquid	Flammable liquid	Flammable liquid
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not applicable	Not applicable	Not applicable

Limiting quantities: 1 L

HAZCHEM code: 2(S)E; 3(S) E

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 10, 2023. SANS 10234:2024.

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH).

Relevant information regarding restrictions: None.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP].

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes. National Environmental Management: Waste Act 59 of 2008.

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

International Legislation: IATA Dangerous Goods Regulation (DGR) 64th Edition 2023. IMDG Code, International Maritime Dangerous Goods Code, 2022 Edition (inc. Amendment 41-22)

15.2 Chemical Safety Assessment carried out?

No.

SECTION 16. OTHER INFORMATION

Indication of changes:

Updated format all sections.

Classification and H statements (number and full text) abbreviations:

H226 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

Abbreviations:

AND	European Provisions concerning the International Carriage of Dangerous Goods by inland Waterways
ADR	The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service Number
COD	Chemical Oxygen Demand
EC ₅₀	Half Maximal Effective Concentration
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Dangerous Goods
LD ₅₀	Lethal Dose 50
LC ₅₀	Lethal Concentration 50
RID	The Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
TWA	Time Weighted Average
UN	United Nations

Training instructions:

Use as instructed.

Further information:

Safety Data Sheet (SDS)

ETHANOL (C₂H₅OH)

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their purposes. In no event shall Alco NCP be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages, howsoever arising, even if AlcoNCP has been advised of the possibility of such damages.

SECTION 17. ADDITIONAL INFORMATION

1. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall AlcoNCP be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if AlcoNCP has been advised of the possibility of such damages.
2. This product may be denatured upon request with small quantities ($\leq 5\%v/v$) of one or more of the following denaturants: Butanol (CAS No: 71-36-3); Denatonium Benzoate (Bitrix) (CAS No:3734-33-6); Di-ethyl Phthalate (DEP) (CAS No: 84-66-2); Ethyl Acetate (CAS 141-78-6); Hibitane (CAS No: 82432-16-4); Iso-amyl alcohol (123-51-3), Iso-propyl alcohol (CAS No:67-63-0); Menthol (CAS No: 2216-51-5); Methanol (CAS No: 67-56-1); Propylene Glycol (CAS No: 57-55-6); Tertiary-Butyl Alcohol (CAS No: 75-65-0); Wood Naphtha (CAS No: 67-56-1), or formulations as per the Specialised Denaturants list in the Industrial Solvents handbook.
3. This product may be blended upon request with flavourants (alcoholic or non-alcoholic), such as malt, Gin, Anethole, etc.

Change Details

Revision 2.0 - Changed MSDS Format, Updated contents to include current information available. **Revision 3.0** - Included international reference to IATA Dangerous Goods Regulation (DGR) 55th Edition 2014, Include CAS numbers for denaturants. **Revision 4.0** - Updated IMDG class in accordance with IMDG Code, 2008 Edition, Included reference to IMDG Code, 2008 Edition. **Revision 5.0** Included EU-GHS/CLP requirements under Hazard Identification. **Revision 6.0** - Updated product and company identification, Updated hazard identification section, Updated fire-fighting measures section, Updated exposure control/personal protection section, Updated physical properties section, Updated stability and reactivity section, Updated regulatory information to include current DGR reference, Updated "Other information", Updated references. **Revision 7.0** - Updated section 17.2 to include Tertiary-butyl alcohol. **Revision 8.0** - Updated reference to international legislation to include current versions. Corrected spelling error on page 6. Updated section 17. **Revision 9.0** - Changed company name and logo. **Revision 10.0** - Updated IMDG Code reference and IATA DGR reference. **Revision 11.0** - Updated to ensure SDS is aligned to the GHS Classification requirements