

## MATERIAL SAFETY DATA SHEET

NEW CERAMIC COATINGS Pty Ltd  
11/50 Kalaroo rd Redhead -ph/ Fax 49479234

<b>PRODUCT : ETHANOL</b>	<b>Infosafe No AEIQL</b> <b>ISSUED: August 2002</b>
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<b>UN: 1170</b>	<b>D.G.: CLASS: 3</b>	<b>CAS NO: 64-17-5</b>
<b>HAZCHEM: 2 (Y) E</b>	<b>SUB. RISK: Not Applicable</b>	<b>SUSDP: (FED) – (NZ)</b>
<b>G.T.EPG: 3A1</b>	<b>SPEC.EPG: Not Applicable</b>	<b>PACK: GRP: II</b>

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**PRODUCT IDENTIFICATION**


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**CORRECT SHIPPING NAME: ETHANOL****OTHER NAMES:** Ethyl Alcohol, with no Denaturant, Alcohol, with no Denaturant

NOTE: Amtrade Infosafe Linked dangerous Goods Data may not be present

**Proper Shipping Name: ETHANOL**

<b>UN 1170</b>	<b>CLASS 3</b>	<b>HAZCHEM 2(Y) E</b>	<b>GTEPG 3A1</b>	<b>PACK GRP II</b>
<b>TRADE NAMES</b>		<b>MANUF: SHELL</b>	<b>MANCODE</b>	
ETHANOL 100		BULK		337607
ETHANOL 100		DRUM		337594
ETHANOL 100 HG		BULK		337586
ETHANOL 100 HG		DRUM		337578
-				
EHTANOL 95		PAIL		338634
EHTANOL 95		BULK		337682
EHTANOL 95		DRUM		337674
EHTANOL 95		BULK		337666
EHTANOL 95		DRUM		337658
-				
ETHANOL 96 BG		BULK		337640
ETHANOL 96 BG		DRUM		337631
-				
ETHANOL 96 HIGH GRADE		BULK		337623
ETHANOL 96 HIGH GRADE		BRUM		337615

# MATERIAL SAFETY DATA SHEET

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**PRODUCT: ETHANOL > 95%, WATER <5%**

**Infosafe No AEIQL  
ISSUED:**

## PRODUCT INFORMATION - OTHER NAMES:- (continued)

### INGREDIENTS:

CHEMICAL ENTITY	CAS NO	PROPORTION
Ethanol	64-17-5	>99.8%
Water	7732-18-5	<0.2
Or		
Ethanol	64-17-5	>95%
Water	7732-18-5	<5%

## PHYSICAL DESCRIPTION / PROPERTIES

### APPEARANCE

Clear, colourless mobile liquid, with a moderate ethereal odour

### FORMULA

CH<sub>3</sub> – CH<sub>2</sub> – OH

Boiling Point	78 C
Melting Point	-117 C
Vapor Pressure	5.7 kPa @ 20 C
Volatile Component	100%
Specific Gravity	0.79 @ 20 C
Flash Point	13 C (abel)
Flammability Limits	LFL 3.3% UFL 19 %
Auto ignition Temp	423 C
Rel. Vapor density	1.6 (Air 1)
Molecular Weight	46.2 (Ethanol)
Form	Liquid

### Other Properties

**SOLUBILITY:** Miscible in water, methanol, ether, chloroform, and acetone.

### USE

Solvent for resins, fats, fatty acid, oil, hydrocarbons / extraction medium, blending agents in the manufacture of dyes, pharmaceuticals, elastomers, detergents, cleaning preparations, surface coatings.

## HEALTH HAZARD INFORMATION

### ACUTE EFFECTS

#### SWALLOWED

Significant absorption can result in central nervous system depression with symptoms of headache, dizziness, fatigue and nausea, large dose may cause unconsciousness. If the victim is unco-ordinated there is a greater likelihood of vomit entering the lungs and causing complications.

#### EYE

May irritate the eyes

#### SKIN

Unlikely to cause skin irritation following brief or occasional contact, however, repeated or prolonged contact may cause skin irritation and may lead to dermatitis. Will have a degreasing action on the skin.

#### INHALED

The vapor may irritate the mucous membrane and respiratory tract. Vapors can affect the central nervous system and result in headaches, dizziness and possible nausea. High concentrations of vapours, of exposure is prolonged, may cause loss of co-ordination, impaired judgement and unconsciousness. Excessive chronic absorption by inhalation or ingestion can result in liver damage

### CHRONIC EFFECTS

Evidence from animal tests and studies on exposed humans indicate that repeated or prolonged exposure to this chemical could result in liver damage.

#### SWALLOWED

Rinse mouth with water, Give plenty of water drink. If more than 15 minutes from a hospital, induce vomiting preferably using IPECAC Syrup APF, by using fingers in the throat. Seek immediate medical assistance.

#### EYE

Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.

#### SKIN

Wash with plenty of soap and wash. Remove contaminated clothing and wash before re-use. Seek medical advice if affects persist.

#### INHALED

Remove victim to fresh air, then keep warm and rest until fully recovered. Seek medical attention. Remove contaminated clothing and loosen remaining clothing.

<b>PRODUCT: ETHANOL &gt; 95%, WATER &lt;5%</b>	<b>Infosafe No AEIQL ISSUED:</b>
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**FIRST AID AND FACILITIES**

Safety shower and eye wash plus normal washroom facilities.

**ADVICE TO DOCTOR**

Treat symptomatically.

**TOXICITY DATA**

Oral LD (rat): 7060 mg/kg  
 Dermal LD50 (rabbit): 20g/kg  
 Inhalation LC50 (rat): 20,000 ppm/10hrs  
 Estimated fatal dose (human) 300-400 ml of pure ethanol

**PRECAUTIONS FOR USE**

**EXPOSURE STANDARDS**

Ethanol 1000ppm 1880 mg/m3 TWA

**ENGINEERING CONTROLS**

Avoid breathing vapours. Ensure ventilation is adequate to maintain air concentrations below exposure standards. Local exhaust ventilation as recommended. The vapour is heavier than air – prevent concentration in sumps  
 Avoid all ignition sources. The vapour may travel a considerable distance to the source of ignition and flash back.  
 Flameproof equipment is necessary in the area where this chemical is used. Nearby equipment must be earthed. Hoses should be electrically continuous and containers bonded to avoid static charge build-up.

**PERSONAL PROTECTION**

Avoid eye contact and repeated or prolonged skin contact. Do not enter confined spaces where vapour may have accumulated. Wear overalls, safety glasses and impervious gloves.  
 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, a final assessment should be made by the user. If inhalation risk exists wear organic vapor respirator meeting the requirements of AS 1715 and AS 1716.

Always wash hands before smoking, drinking, or using the toilet.

**FLAMMABILITY**

Highly flammable liquid. Vapor may travel a considerable distance to the source of ignition and flash back. May form explosive mixtures with air.

**ENVIRONMENT**

Aquatic Toxicity: Not a significant hazard  
 LC50 (fingerling trout : 24 hours) : 11200mg/l  
 LC50 (guppy, 7 days): 11050 ppm

**SAFE HANDLING INFORMATION**

**STORAGE AND TRANSPORT**

Transport in accordance with the Australian Dangerous Goods Code.  
 Store in accordance with the Australian Dangerous Goods (Storage & Handling) Regulations and AS 1940, Storage and Handling of Flammable and Combustible Liquids.

Store in a cool, well ventilated area, out of direct sunlight and away from heat and ignition sources. Containers should always be kept closed in storage and properly labeled. Store only in original or approved containers. Do not store in low or enclosed areas where vapors may become trapped. Avoid sources of ignition, prevent build-up of flammable vapors.

**PACKAGING AND LABELLING**

Not a hazardous workplace substance.

**HAZARD CATEGORY:** FLAMMABLE  
 R11 - HIGHLY FLAMMABLE

- S7 Keep container tightly closed
- S16 Keep away from sources of ignition – No smoking
- S33 Take precautionary measures against static discharge
- S23 Do not breathe vapors
- S26 In case of contact with eyes, rinse immediately with plenty off water and contact a doctor or Poisons information Centre.

Dangerous Goods Labeling required, see Dangerous Regulations.  
 Not a Scheduled Poison.

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**SPILLS AND DISPOSAL**

Remove or extinguish all ignition sources.

**SPILLAGE**

Personnel should wear full protective clothing. Keep public away. Dam and recover. Prevent entry into drainage systems, rivers etc. Collect residues with absorbent material such as sand, earth or sawdust. Warn occupants downwind. Advise authorities. Wash area down with large quantities of water. Collect and seal in a clean, labeled container for recovery or disposal.

**DISPOSAL**

In accordance with local, State & Federal EPA waste regulations.

Normally suitable for incineration at an approved facility.

After recovery and evaporation, remaining soil may be disposed of to an approved landfill, or if approved, allowed to evaporate.

**FIRE / EXPLOSION HAZARD**

Highly flammable liquid

**EXTINGUISHING MEDIA:** water fog (or if unavailable a fine water spray), foam, Carbon Dioxide, or dry powder.

**UNUSUAL FIRE / EXPLOSION HAZARDS:** Vapor / air mixture may ignite explosively.

Flashback along vapor trail may occur.

**PRECAUTIONS:** Wear protective equipment including self-contained breathing apparatus if there is a risk of vapor exposure. Warn occupants downwind. Use water spray to cool fire exposed surfaces and any adjacent storage vessels. Shut off source of product if safe to do so. Remove sources or re-ignition. Remove containers from the path of the fire if safe to do so.

**Reactivity Data**

Stable.

**CONDITIONS TO AVOID:**

Ignition Sources

**INCOMPATIBLE MATERIALS:**

Strong oxidizing agents. Concentrated nitric acid and concentrated sulphuric acid

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon monoxide from incomplete burning

**HAZARDOUS POLYMERISATION:**

Will not occur

**OTHER INFORMATION****User data**

Prepared: JS9807

Prod Code: (II Products)

Authorised: D. Latta

WSA Haz N

Extra: PMF M-ET-MDS-080

JS9707/9803

DG 6<sup>TH</sup> Ed

**Contact Point**

For EMERGENCIES ONLY CONTACT: 1800-033-111 SHELL AUST (All Hours)

Police and Fire Brigade: Dial 000. If ineffective dial 1100 (exchange)