

Phone: +27 11 873 9000  
 Fax: +27 11 825 4528  
 Mobile: +27(0)824447123  
 e-mail: [solders@nationalsolder.com](mailto:solders@nationalsolder.com)  
 Website: [www.nationalsolder.com](http://www.nationalsolder.com)

13 Arkin Street  
 Industries East  
 Germiston  
 1401  
 P.O.BOX 1258  
 Germiston  
 1400

## 1. Identification of the substance/preparation and of the company/undertaking

Trade name	Iso-propyl Alcohol
Synonyms	Iso-propylol
Use	Solvents, For industrial use only.
Company	Rolfes Chemicals A Division of Rolfes Group of Companies Cnr Brammer and Strachan, Industries East Germiston
Information (Product safety)	Telephone: +27 11 873 0157 Fax: +27 11 8738480
Emergency telephone	South Africa +27 (0)86 044 44 11

## 2. Hazards identification

### Identification of the risks

R11 Highly flammable.  
 R36 Irritating to eyes.  
 R67 Vapours may cause drowsiness and dizziness.

## 3. Composition/information on ingredients

### Preparation on the base:

propan-2-ol; isopropyl alcohol; isopropanol  
 Contents: 87.013 %W/W

CAS-No. 67-63-0  
 Symbol(s) F, Xi

Index-No. 603-117-00-0  
 R-phrases) -R11 -R36 -R67

EC-No. 200-661-7

ethanol; ethyl alcohol  
 Contents: 12.771 %W/W

CAS-No. 64-17-5  
 Symbol(s) F R-phrases) -R11

Index-No. 603-002-00-5

EC-No. 200-578-6

For the full text of the R-phrases mentioned in this Section, see Section 16.

## 4. First aid measures

General advice	Victim to lie down in the recovery position, cover and keep him warm.
Inhalation	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.





# NATIONAL SOLDER CO.

Phone: +27 11 873 9000  
Fax: +27 11 825 4528  
Mobile: +27(0)824447123  
e-mail: [solders@nationalsolder.com](mailto:solders@nationalsolder.com)  
Website: [www.nationalsolder.com](http://www.nationalsolder.com)

13 Arkin Street  
Industries East  
Germiston  
1401

P.O. BOX 1258  
Germiston  
1400

**Eye contact** Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses. Call a physician immediately.

**Ingestion** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

## 5. Fire-fighting measures

**Suitable extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards during fire fighting** Flash back possible over considerable distance.

**Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective suit.

**Further information** Use water spray to cool unopened containers.

## 6. Accidental release measures

**Personal precautions** Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.

**Environmental precautions** Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material and dispose of as hazardous waste.

## 7. Handling and storage

### Handling

**Safe handling advice** Do not breathe vapours or spray mist. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment.

**Advice on protection against fire and explosion** Keep away from open flames, hot surfaces and sources of ignition. Use explosion-proof equipment.

### Storage

**Requirements for storage areas and containers** Keep containers tightly closed in a cool, well-ventilated place.

## 8. Exposure controls/personal protection

Components with workplace control parameters  
NATIONAL OCCUPATIONAL EXPOSURE LIMITS  
EUROPEAN OCCUPATIONAL EXPOSURE LIMITS





# NATIONAL SOLDER CO.

Phone: +27 11 873 9000  
 Fax: +27 11 825 4528  
 Mobile: +27(0)824447123  
 e-mail: [solders@nationalsolder.com](mailto:solders@nationalsolder.com)  
 Website: [www.nationalsolder.com](http://www.nationalsolder.com)

13 Arkin Street  
 Industries East  
 Germiston  
 1401

P.O. BOX 1258  
 Germiston  
 1400

## Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

## Personal protective equipment

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

### Hand protection

Gloves suitable for permanent contact:

Material: butyl-rubber

Break through time: 4 h

Material thickness: 0.5 mm

unsuitable gloves

Material: Polyvinylchloride, leather, nitrile rubber/nitrile latex,  
 natural rubber/natural latex

### Eye protection

Safety glasses with side-shields

### Skin and body protection

Protective suit, Safety shoes

### Hygiene measures

Wash hands before breaks and immediately after handling the product.

### Protective measures

Wear suitable protective equipment.

## 9. Physical and chemical properties

Form	liquid
Colour	colourless
Odour	aromatic pleasant acetone-like
pH	neutral
Melting point/range	-88.5 °C
Boiling point/boiling range	82.1 - 83 °C
Flash point	14 °C; closed cup
Autoignition temperature	363 °C
Lower explosion limit	3.3 %(V)
Upper explosion limit	19 %(V)
Density	0.785 g/cm <sup>3</sup> ; 20 °C
Water solubility	completely miscible, completely soluble
Solubility in other solvents	Medium: Diethylether; completely soluble
Viscosity, dynamic	2.4 mPa.s
Relative vapour density	2.08

## 10. Stability and reactivity

### Materials to avoid

Oxidizing agents, Acids and bases

### Hazardous

Carbon oxides





# NATIONAL SOLDER CO.

Phone: +27 11 873 9000  
 Fax: +27 11 825 4528  
 Mobile: +27(0)824447123  
 e-mail: [solders@nationalsolder.com](mailto:solders@nationalsolder.com)  
 Website: [www.nationalsolder.com](http://www.nationalsolder.com)

13 Arkin Street  
 Industries East  
 Germiston  
 1401

P.O. BOX 1258  
 Germiston  
 1400

decomposition products

## 11. Toxicological information

### Acute oral toxicity

Isopropyl alcohol:  
 LD50 rat: 5,045 mg/kg; literature value

Isopropyl alcohol:  
 LD50 rabbit: 6,410 mg/kg; literature value

Ethanol:  
 LD50 rat: 7,060 mg/kg; literature value

### Acute inhalation toxicity

Isopropyl alcohol:  
 LC50 rat: 16,000 mg/l; literature value; 8 h

Ethanol:  
 LC50 rat: 66,000 mg/l; literature value; 4 h

### Acute dermal toxicity

Isopropyl alcohol:  
 LD50 rabbit: 12,800 mg/kg; literature value

Ethanol:  
 LDLo rabbit: 20,000 mg/kg; literature value

## 12. Ecological information

### Ecotoxicity effects

#### Toxicity to fish

Isopropyl alcohol:  
 LC50 Pimephales promelas: > 6,000 mg/l; 96 h; (literature value)

Ethanol:  
 LC50 Pimephales promelas: 15,300 mg/l; 96 h; literature value

## 13. Disposal considerations

### Product

Dispose of in accordance with local regulations.

### Contaminated packaging

Store containers and offer for recycling of material when in accordance with the local regulations.

## 14. Transport information

### ADR

UN-Number: 1987; Class: 3; Packaging group: II; F1;  
 Description of the goods: ALCOHOLS, N.O.S. (ethanol, iso-propanol)

### RID

UN-Number: 1987; Class: 3; Packaging group: II; F1;  
 Description of the goods: ALCOHOLS, N.O.S. (ethanol, iso-propanol)

### ADNR

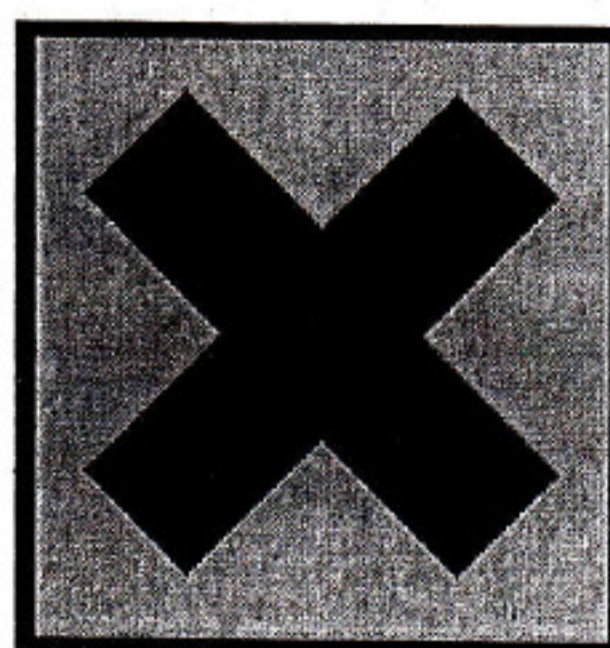
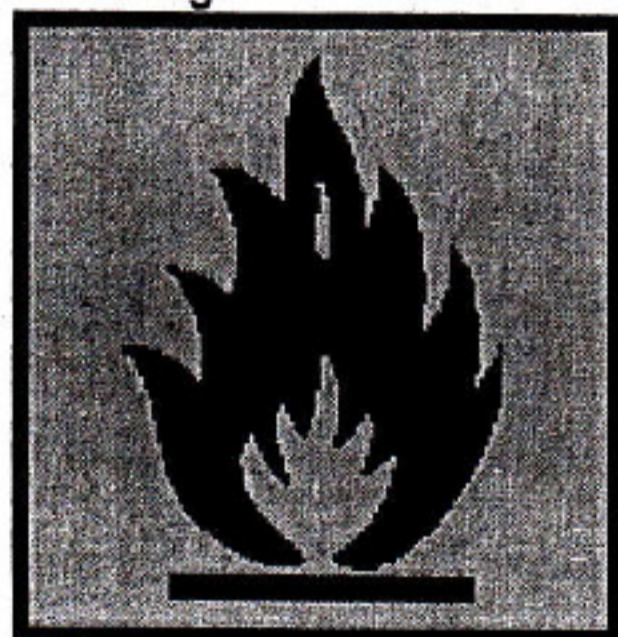
UN-Number: 1987; Class: 3; Packaging group: II; F1;  
 Description of the goods: ALCOHOLS, N.O.S. (ethanol, iso-propanol)



IMDG	UN-Number: 1987; Class: 3; EmS: F-E, S-D; Packaging group: II; Description of the goods: ALCOHOLS, N.O.S. (ethanol, iso-propanol)
ICAO/IATA	UN-Number : 1987; Class: 3; Packaging group: II; Description of the goods: Alcohols, n.o.s. (ethanol, iso-propanol)
Further information	IMO Shipping name: Noxious Liquid,(11), n.o.s.(ISOPROPYLOL, contains Isopropyl Alcohol), Cat.Z

**15. Regulatory information**

Labelling



Regulatory base	1999/45/EC
Symbol(s)	F: Highly flammable Xi: Irritant
R-phrases(s)	R11: Highly flammable. R36: Irritating to eyes. R67: Vapours may cause drowsiness and dizziness.
S-phrases(s)	S 9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S60: This material and its container must be disposed of as hazardous waste.

**16. Other information**

All reasonable efforts were exercised to compile this MSDS in accordance with ISO 11014 and ANSIZ400.1.1993. The MSDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since Rolles Chemicals cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this MSDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product. Although all reasonable efforts were exercised in the compilation of this MSDS, Rolles Chemicals does not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.