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

Trade name  
n-Propanol

Synonyms  
n-Propanol, 1-Propanol, hydroxypropane, 1-Propyl alcohol, ethyl carbinol, n-Propan-1-ol, propyl alcohol

Product code  
2044

Use  
Solvents, For industrial use only.

Company  
Sasol Solvents
A division of Sasol Chemical Industries
Sturdee Avenue 2
ZA 2196  Rosebank

Information (Product safety)  
Telephone: +27112800000  Fax: +27112800198

Emergency telephone  
Europe, Israel, Africa, Americas  +44 (0)208 762 8322
Middle East, Arabic African countries  +961 3 487 287
Asia Pacific  +65 633 44 177
China  +86 10 5100 3039
South Africa  +27 (0)17 610 4444

2. Composition/information on ingredients

propan-1-ol; n-propanol

Contents: 99.90 %W/W

CAS-No.  71-23-8  Index-No.  603-003-00-0  EC-No.  200-746-9
Symbol(s)  F, Xi  R-phrase(s) -R11 -R41 -R67

For the full text of the R phrases mentioned in this Section, see Section 16.
Material Safety Data Sheet
n-Propanol
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3. Hazards identification

Identification of the risks
R11    Highly flammable.
R41    Risk of serious damage to eyes.
R67    Vapours may cause drowsiness and dizziness.

Particular risks to human beings and the environment
Highly flammable.

4. First aid measures

General advice When symptoms persist or in all cases of doubt seek medical advice.

Inhalation Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. Fire-fighting measures

Suitable extinguishing media Water spray, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO2)

Extinguishing media which shall not be used for safety reasons No information available.

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 Cool containers / tanks with water spray.
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**
- Should not be released into the environment. 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**
- Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Take precautionary measures against static discharge. Ensure all equipment is electrically grounded before beginning transfer operations.

**Advice on protection against fire and explosion**
- Keep away from heat and sources of ignition. Use explosion-proof equipment.

**Storage**

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

8. Exposure controls / personal protection

**Components with workplace control parameters**

**NATIONAL OCCUPATIONAL EXPOSURE LIMITS**

**EUROPEAN OCCUPATIONAL EXPOSURE LIMITS**
- Contains no substances with occupational exposure limit values.

**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
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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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>alcoholic</td>
</tr>
<tr>
<td>pH</td>
<td>7</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>-126.2 °C</td>
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<tr>
<td>Boiling point/boiling range</td>
<td>97.2 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>15 °C; closed cup</td>
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<tr>
<td>Flash point</td>
<td>23 °C; open cup</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>371 °C</td>
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<tr>
<td>Lower explosion limit</td>
<td>2.1 %(V)</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>13.5 %(V)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>27.998 hPa; 25 °C</td>
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<tr>
<td>Density</td>
<td>0.805 g/cm³</td>
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<tr>
<td>Water solubility</td>
<td>completely miscible</td>
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<tr>
<td>Viscosity, dynamic</td>
<td>2.170 mPa.s</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>2.1</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Materials to avoid
Strong oxidizing agents, Incompatible with acids., Halogenated compounds

Hazardous decomposition products
Carbon oxides

Hazardous reactions
Hazardous polymerisation does not occur.
11. Toxicological information

Acute oral toxicity  
LD50 rat: 1,870 mg/kg; literature value

Acute inhalation toxicity  
LC50 rat: 4,000 mg/l; 4 h; literature value

Acute dermal toxicity  
LD50 rabbit: 4,060 mg/kg; literature value

12. Ecological information

Ecotoxicity effects

Toxicity to fish  
LC50 Pimephales promelas: 4,480 mg/l; 96 h; literature value

13. Disposal considerations

Product  
In accordance with local and national regulations, Do not contaminate ponds, waterways or ditches with chemical or used container, The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging  
Do not burn, or use a cutting torch on, the empty drum, Triple rinse containers, Can be offered for recycling, re-conditioning or puncture.

14. Transport information

ADR  
UN-Number: 1274; Class: 3; Packaging group: II; F1; Description of the goods: n-PROPANOL

RID  
UN-Number: 1274; Class: 3; Packaging group: II; F1; Description of the goods: n-PROPANOL

ADNR  
UN-Number: 1274; Class: 3; Packaging group: II; F1; Description of the goods: n-PROPANOL

IMDG  
UN-Number: 1274; Class: 3; EmS: F-E, S-D; Packaging group: II; Description of the goods: PROPAOL
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n-Propanol

Version 1.11 Revision Date 16.07.2007

ICAO/IATA UN-Number : 1274; Class: 3; Packaging group: II; Description of the goods: n-Propanol

15. Regulatory information

Labelling

Regulatory base 67/548/EEC
Symbol(s) F: Highly flammable
Xi: Irritant
R-phrase(s) R11: Highly flammable.
R41: Risk of serious damage to eyes.
R67: Vapours may cause drowsiness and dizziness.
S-phrase(s) S 2: Keep out of the reach of children.
S 7: Keep container tightly closed.
S16: Keep away from sources of ignition - No smoking.
S24: Avoid contact with skin.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39: Wear eye/face protection.

Hazardous components which must be listed on the label propan-1-ol; n-propanol

16. Other information

Full text of R-phrases referred to under sections 2 and 3
Material Safety Data Sheet
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R11 Highly flammable.
R41 Risk of serious damage to eyes.
R67 Vapours may cause drowsiness and dizziness.

All reasonable efforts were exercised to compile this MSDS in accordance with ISO 11014 and
ANSI Z400.1.1993. 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 Sasol
and its subsidiaries 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, Sasol does not expressly
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advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.

The MSDS was created by: Motlatsi (MS) Titipana
The MSDS was approved by: Aggie Kotze