

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 03/13/2013

Reviewed on 03/13/2013

1 Identification of substance

- **Product details**
- **Trade name: Isopropanol**
- **Manufacturer/Supplier:**
QIAGEN GmbH, QIAGEN Str. 1, 40724 Hilden, Germany
Tel.: (+49)-2103/29-0
- **Information department:**
QIAGEN Technical Service
QIAGEN Inc., 27220 Turnberry Lane, Valencia, CA 91355, USA
Tel.: 1-800-DNA-PREP (1-800-362-7737)
Email: techservice-us@qiagen.com
- **Emergency information:**
CHEMTREC
USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-527-3887

2 Composition/Data on components

- **Chemical characterization:**
- **CAS No. Description**
67-63-0 propan-2-ol
- **Identification number(s)**
- **EINECS Number:** 200-661-7
- **EU Number:** 603-117-00-0

3 Hazards identification

- **Hazard description:**
Irritant
Highly flammable
- **Information pertaining to particular dangers for man and environment:**
Has a narcotizing effect.
Highly flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**
Health = 1
Fire = 3
Reactivity = 0
- **WHMIS-ratings (scale 0 - 4)**
Health = 1
Fire = 3
Reactivity = 0

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Immediately call a doctor.

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5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Keep receptacles tightly sealed.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

CAS No.	Designation of material	%	Type	Value	Unit
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67-63-0 propan-2-ol

PEL 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm

Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm

Long-term value: 492 mg/m³, 200 ppm

BEI

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Protection of hands:** Protective gloves
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:** Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form: Fluid
Color: Clear
Odor: Alcohol-like

· Change in condition

Melting point/Melting range: -89.5°C (-129°F)

Boiling point/Boiling range: 82°C (180°F)

· **Flash point:** ≤ 21°C (≤ 70°F)

· **Ignition temperature:** 425°C (797°F)

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower: 2 Vol %

Upper: 12 Vol %

· **Vapor pressure at 20°C (68°F):** 43 hPa (32 mm Hg)

· **Density at 20°C (68°F):** 0.785 g/cm³

· Solubility in / Miscibility with

Water at 20°C (68°F): 1 g/l

Organic solvents: 100.0 %

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· **Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.

· **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

67-63-0 propan-2-ol

Oral LD50 4570 mg/kg (rat)

Dermal LD50 13400 mg/kg (rab)

Inhalative LC50/4 h 30 mg/l (rat)

· Primary irritant effect:

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

12 Ecological information

· General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** 3
- **Identification number:** UN1219
- **Packing group:** II
- **Proper shipping name (technical name):** ISOPROPANOL (ISOPROPYL ALCOHOL)
- **Label:** 3
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** 3 Flammable liquids
- **Danger code (Kemler):** 33
- **UN-Number:** 1219
- **Packaging group:** II
- **Description of goods:** 1219 ISOPROPANOL (ISOPROPYL ALCOHOL)
- **Maritime transport IMDG:**
- **IMDG Class:** 3
- **UN Number:** 1219
- **Label:** 3
- **Packaging group:** II
- **Marine pollutant:** No
- **Propper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1219
- **Label:** 3
- **Packaging group:** II
- **Propper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)

15 Regulations

- **Sara**
- **Section 313 (Specific toxic chemical listings):** _____
Substance is listed.
- **TSCA (Toxic Substances Control Act):**
- **Proposition 65**
- **Chemicals known to cause cancer:** _____
Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** _____
Substance is not listed.

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- **Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.
- **Chemicals known to cause developmental toxicity:**
Substance is not listed.
- **Carcinogeny categories**
- **EPA (Environmental Protection Agency)**
Substance is not listed.
- **IARC (International Agency for Research on Cancer)**
Substance is listed.
- **NTP (National Toxicology Program)**
Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.
- **MAK (German Maximum Workplace Concentration)**
Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.
- **Product related hazard informations:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**
Irritant
Highly flammable
- **Risk phrases:**
Highly flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness
- **Safety phrases:**
Keep container tightly closed.
Keep away from sources of ignition - No smoking.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **National regulations:**
- **Technical instructions (air):**
- **Class Share in %**
- **NK 50-100**
- **Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.