

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.12.2020

Version number 3

Revision: 05.03.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: *propan-2-ol***

· **Chemical Identification:**

isopropyl alcohol

isopropanol

1-Methylethanol

2-Hydroxypropane

2-Propanol

Dimethylcarbinol

I.P.A.

Petrohol

· **Article number:** 1626

· **CAS Number:**

67-63-0

· **EC number:**

200-661-7

· **Index number:**

603-117-00-0

· **Registration number** *01-2119457558-25-XXXX*

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Only for the use of professionals users

· **Life cycle stages**

IS Use at industrial Sites

M Manufacture

F Formulation or re-packing

PW Widespread use by professional workers

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU9 Manufacture of fine chemicals

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU24 Scientific research and development

· **Product category**

PC19 Intermediate

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC21 Laboratory chemicals

PC37 Water treatment chemicals

· **Process category**

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC10 Roller application or brushing

PROC13 Treatment of articles by dipping and pouring

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PROC15 Use as laboratory reagent

· Environmental release category

ERC1 Manufacture of the substance

ERC2 Formulation into mixture

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC6a Use of intermediate

ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

· Application of the substance / the mixture

Chemical for research, development, manufacturing, laboratory chemical for analysis.

· 1.3 Details of the supplier of the safety data sheet
· Manufacturer/Supplier:

Biosolve Chimie

20 Rue Roger Husson, 57260 Dieuze, France

Tel: +33 3 878 675 80/81/82/83/84/85

Email: info@biosolvechimie.com

Biosolve B.V.

Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.

Tel: +31-(0)40-2071300

Fax: +31-(0)40-2048537

Email: info@biosolve-chemicals.com

· Further information obtainable from: Product safety department.

· 1.4 Emergency telephone number:

Contact list of appointed bodies for information relating to emergency health response, according to Art. 45(1) Reg. (EC) No 1272/2008.

 see: <https://poisoncentres.echa.europa.eu/home>.

 Help desk: <http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>).

Data from: ECHA - EUROPEAN CHEMICALS AGENCY

For more information see section 16.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements
· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

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Hazard pictograms


GHS02 GHS07

Signal word *Danger*
Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin 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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances
CAS No. Description

67-63-0 propan-2-ol

Identification number(s)

EC number: 200-661-7

Index number: 603-117-00-0

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.
Take measures to prevent the build up of electrostatic charge.
- **Information about fire - and explosion protection:**
Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **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 container tightly sealed.

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- Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **DNELs**
67-63-0
Workers Inhalation Long-term systemic effects 500 mg/m³
Workers Skin contact Long-term systemic effects 888mg/kg BW/d
Consumers Inhalation Long-term systemic effects 89 mg/m³
Consumers Skin contact Long-term systemic effects 319mg/kg BW/d
Consumers Ingestion Long-term systemic effects 26mg/kg BW/d
- **PNECs**
67-63-0
Soil 28 mg/kg
Marine water 140.9 mg/l
Fresh water 140.9 mg/l
Marine sediment 552 mg/kg
Fresh water sediment 552 mg/kg
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **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.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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

SECTION 9: Physical and chemical properties

 · **9.1 Information on basic physical and chemical properties**

 · **General Information**

 · **Appearance:**

Form:	Fluid
Colour:	Clear
· Odour:	Alcohol-like
· Odour threshold:	No data available.

 · **pH-value:** No data available

 · **Change in condition**

Melting point/freezing point:	-89.5 °C
Initial boiling point and boiling range:	82 °C

 · **Flash point:** 13 °C

 · **Flammability (solid, gas):** Not applicable.

 · **Ignition temperature:** 425 °C

 · **Decomposition temperature:** No data available

 · **Auto-ignition temperature:** No data available

 · **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

 · **Explosion limits:**

Lower:	2 Vol %
Upper:	12 Vol %

 · **Vapour pressure at 20 °C:** 43 hPa

· Density at 20 °C:	0.785 g/cm ³
· Relative density	No data available
· Vapour density	No data available
· Evaporation rate	No data available

 · **Solubility in / Miscibility with water at 20 °C:** 1 g/l

 · **Partition coefficient: n-octanol/water:** No data available

 · **Viscosity:**

 · **Dynamic at 20 °C:** 2.43 mPas

 · **9.2 Other information** No further relevant information available.

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **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 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

HP3 Flammable

HP4 Irritant - skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1219

· **14.2 UN proper shipping name**

· **ADR**

UN1219 ISOPROPANOL (ISOPROPYL ALCOHOL)

· **IMDG, IATA**

ISOPROPANOL (ISOPROPYL ALCOHOL)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

3 (F1) Flammable liquids.

· **Label**

3

· **IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

II

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

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· EMS Number:	3-06
· Stowage Category	B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category P5c FLAMMABLE LIQUIDS**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 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.

- **Department issuing SDS:** Product safety department
- **Contact:**
EU Poison Centers:

Country Telephone number
 Austria +4314064343
 Belgium 070 245245
 Bulgaria (+)35929154233
 Croatia (+3851)23-48-342

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Czech Republic +420224919293; +420224915402
 Denmark 82121212
 Estonia 16662; (+372)6269390
 Finland 9471977
 France +33(0)145425959
 Hungary (+36-80)201-199
 Iceland 5432222
 Ireland +353(1)8092166
 Italy BERGAMO Ospedali Riuniti di Bergamo Tel. 800 88.33.00
 FIRENZE Azienda Ospedaliera Careggi Tel. 055 79.47.819
 MILANO Azienda Ospedaliera Niguarda Cà Granda Tel. 02 66.10.10.29
 NAPOLI Ospedale Vincenzo Cardarelli Tel. 081 74.72.870
 PAVIA Fondazione Salvatore Maugeri Tel. 0382 24.444
 ROMA Policlinico Universitario "A. Gemelli" Tel. 06 30.54.343
 ROMA Università degli Studi di Roma "La Sapienza" Tel. 06 49.97.80.00
 Germany Berlin : 030/19240
 Bonn : 0228/19240
 Erfurt : 0361/730730
 Freiburg : 0761/19240
 Göttingen : 0551/19240
 Homburg : 06841/19240
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 Netherlands 030-2748888
 Norway 22591300
 Portugal 808250143
 Slovakia (NTIC) +421 2 54 774 166
 Spain +34915620420
 Sweden 112 (begär
 Giftinformation); +46104566786
 Switzerland 145

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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· * **Data compared to the previous version altered.**

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Annex: Exposure scenario

· **Short title of the exposure scenario**

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU9 Manufacture of fine chemicals

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU24 Scientific research and development

· **Product category**

PC19 Intermediate

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC21 Laboratory chemicals

PC37 Water treatment chemicals

· **Process category**

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC10 Roller application or brushing

PROC13 Treatment of articles by dipping and pouring

PROC15 Use as laboratory reagent

· **Environmental release category**

ERC1 Manufacture of the substance

ERC2 Formulation into mixture

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC6a Use of intermediate

ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

· **Notes**

The product is not intended for industrial use.

The product is intended for professional use.

· **Description of the activities / processes covered in the Exposure Scenario**

67-63-0

1. Used as chemical intermediate

Main User Groups : SU 3

Sectors of end-use : SU 3, SU9

Chemical product category : PC19

Process categories : PROC1, PROC2, PROC3, PROC4, PROC8b, PROC15

Environmental Release Categories : ERC1, ERC4, ERC6a

2. Formulation of preparations

Main User Groups : SU 3

Sectors of end-use : SU 10

Process categories : PROC2, PROC3, PROC4, PROC8b, PROC9

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Environmental Release Categories : ERC2

3. Industrial use of processing aids in processes and products, not becoming part of articles

Main User Groups : SU 3

Sectors of end-use : SU 3, SU9

Chemical product category : PC20, PC21

Process categories : PROC1, PROC2, PROC3, PROC4, PROC8b, PROC9, PROC10

Environmental Release Categories : ERC4, ERC6b

4. Used as laboratory reagent

Main User Groups : SU 22

Sectors of end-use : SU 3, SU 22, SU24

Chemical product category : PC19, PC20, PC21

Process categories : PROC10, PROC15

Environmental Release Categories : ERC4, ERC6a, ERC6b

5. Surface treatment

Main User Groups : SU 3

Sectors of end-use : SU 3, SU9

Chemical product category : PC35

Process categories : PROC5, PROC7, PROC8a, PROC10, PROC13

Environmental Release Categories : ERC2, ERC4, ERC6b

· **Conditions of use** Customary application according to section 1.

· **Duration and frequency** 5 workdays/week.

· **Worker**

Application duration : > 4 h

Frequency of use : 220 days/year

· **Environment** Indoor use

· **Physical parameters** See section 9 to the Safety Data Sheet.

· **Physical state** Fluid

· **Concentration of the substance in the mixture**

Raw material.

Covers the percentage of the substance in the product up to 100 %.

· **Used amount per time or activity** Covers the percentage of the substance in the product up to 100 %

· **Other operational conditions** Observe the general safety regulations when handling chemicals.

· **Other operational conditions affecting environmental exposure**

Observe section 6 of the Safety Data Sheet (Accidental release measures).

· **Other operational conditions affecting worker exposure**

Avoid contact with eyes.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

Do not breathe gas/fume/vapour/aerosol.

Keep container tightly closed and in a well-ventilated place.

· **Risk management measures**

· **Worker protection** Observe section 7.1 and 8.1-8.2 of the Safety Data Sheet

· **Organisational protective measures**

Deploy only trained chemical workers.

Ensure that activities are executed by specialists or authorised personnel only.

Keep away from food, beverages and animal feed.

Consider section 4 of the Safety Data Sheet (First aid measures).

Provide emergency eye wash station and mark its location clearly.

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· **Technical protective measures**

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

· **Personal protective measures**

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Tightly sealed goggles

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

· **Measures for consumer protection**

Ensure adequate labelling.

Keep locked up and out of the reach of children.

· **Environmental protection measures**

· **Water** Do not allow to reach ground water, water bodies or sewage system.

· **Soil** Prevent contamination of soil.

· **Notes** In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· **Disposal measures**

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

· **Disposal procedures**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Waste type** Partially emptied and uncleaned packaging

· **Exposure estimation**

· **Worker (dermal)**

67-63-0 Without local exhaust ventilation

PROC1 0.0343 mg/kg BW/d

PROC2 1.37 mg/kg BW/d

PROC3 0.686 mg/kg BW/d

PROC4 6.86 mg/kg BW/d

PROC5 13.7 mg/kg BW/d

PROC7 42.9 mg/kg BW/d

PROC8a 13.7 mg/kg BW/d

PROC8b 13.7 mg/kg BW/d

PROC9 6.86 mg/kg BW/d

PROC10 27.4 mg/kg BW/d

PROC13 13.7 mg/kg BW/d

PROC15 0.343 mg/kg BW/d

The calculated value is smaller than the DNEL.

Risk Characterization ratio <1

· **Worker (inhalation)**

67-63-0 Without local exhaust ventilation

PROC1 0.0175 mg/m³

PROC2 8.76 mg/m³

PROC3 17.5 mg/m³

PROC4 35.1 mg/m³

PROC5 87.6 mg/m³

PROC7 438 mg/m³

PROC8a 87.6 mg/m³

(Contd. on page 15)

Safety data sheet
according to 1907/2006/EC, Article 31

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Trade name: propan-2-ol

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PROC8b 43.8 mg/m³

PROC9 87.6 mg/m³

PROC10 87.6 mg/m³

PROC13 87.6 mg/m³

PROC15 17.5 mg/m³

The calculated value is smaller than the DNEL.

Risk Characterization ratio <1

· **Environment**

A chemical safety assessment was performed according REACH Article 14(3), Annex I, sections 3 (Environmental Hazard assessment) and 4 (PBT/vPvB Assessment). As no hazard was identified, an exposure assessment and risk characterization is not necessary (REACH Annex I section 5.0).

· **Consumer** Not relevant for this Exposure Scenario.

· **Guidance for downstream users**

Please refer to the following documents: ECHA Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system; ECHA Guidance for downstream users; ECHA Guidance on information requirements and chemical safety assessment Part D: Exposure Scenario Building, Part E: Risk Characterisation and Part G: Extending the SDS; VCI/Cefic REACH Practical Guides on Exposure Assessment and Communications in the Supply Chain; CEFIC Guidance Specific Environmental Release Categories (SPERCs).