

Printing date 30.07.2018 Revision: 09.01.2018

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

· 1.1 Product identifier

· Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

· Article number: AL0316

· 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
- · Sector of Use SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- Process category

PROC5 Mixing or blending in batch processes

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

- · Application of the substance / the preparation: Laboratory reagent
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

· Regional representation:

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com Internet Web Site: www.scharlab.com

- Further information obtainable from: technical department
- · 1.4 Emergency telephone number:

Please contact the regional Scharlab distributor/dealer in your country During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

#### **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.



Eye Irrit. 2 H319 Causes serious eye irritation.

(Contd. on page 2)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 1)

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.

· 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/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
- · 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.

(Contd. on page 3)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 2)

• 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
   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 No special precautions are necessary if used correctly.
- · Information about fire and explosion protection:

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.

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:

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

(Contd. on page 4)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 3)

- · 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:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

• Eye protection:



Tightly sealed goggles

#### **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form:
Colour:
Colour:
Odour:
Alcohol-like
Not determined.

PH-value:
Not determined.

· Change in condition

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

· Flash point: 12 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 425 °C

Decomposition temperature: Not determined.

(Contd. on page 5)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 4)

· Auto-ignition temperature: Not determined.

· Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Explosion limits:

Lower: 2 Vol % 12 Vol % 12 Vol % 12 Vol % 43 hPa

Density at 20 °C: 0.785 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate Not determined.

· Solubility in / Miscibility with

water at 20 °C: 1 g/l

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 °C: 2.43 mPas Kinematic: Not determined.

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

### **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 (carcinogenity, 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.

(Contd. on page 6)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 5)

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

#### **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.

UN1219

No

33

1219 ISOPROPANOL (ISOPROPYL ALCOHOL)

ISOPROPANOL (ISOPROPYL ALCOHOL)

- · 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
- · 14.2 UN proper shipping name
- · ADR
- · IMDG, IATA
- · 14.3 Transport hazard class(es)
- · ADR, IMDG, IATA



· Class 3 Flammable liquids.

· Label 3

· 14.4 Packing group · ADR, IMDG, IATA

· 14.5 Environmental hazards:

· Marine pollutant:

• 14.6 Special precautions for user Warning: Flammable liquids.

· Danger code (Kemler):

(Contd. on page 7)



Revision: 09.01.2018 Printing date 30.07.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 6)

· EMS Number: 3-06 · Stowage Category

· 14.7 Transport in bulk according to Annex II

of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

Limited quantities (LQ) Transport category · Tunnel restriction code D/E

UN 1219 ISOPROPANOL (ISOPROPYL · UN "Model Regulation":

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
- · 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.

Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- · Department issuing SDS: product safety department
- Contact: msds@scharlab.com
- 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)

ICAO: International Civil Aviation Organisation

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)

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

(Contd. on page 8)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 7)

#### **Annex: Exposure scenario 1**

- · 1 Short title of the exposure scenario Industrial use
- · Sector of Use

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

- · Process category PROC15 Use as laboratory reagent
- · Environmental release category

ERC2 Formulation into mixture

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

• Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet.

- · 2 Conditions of use
- · Duration and frequency 8hrs (full working shift).
- · Physical parameters

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

- · Physical state Fluid
- · Concentration of the substance in the mixture Raw material.
- · Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- · Other operational conditions affecting worker exposure

Ensure adequate ventilation, especially in closed rooms.

Assumes use at not more than 20 °C above ambient temperature, unless stated differently.

Avoid contact with eyes.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

- · Other operational conditions affecting consumer exposure Keep out of the reach of children.
- · Risk management measures
- · Worker protection
- · Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

· Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

· Personal protective measures

Take care of good cleanliness and tidiness.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Tightly sealed goggles

· Measures for consumer protection

Ensure adequate labelling.

Keep locked up and out of the reach of children.

- · Environmental protection measures
- · Water No special measures required.
- · Disposal measures

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

- · 3 Exposure estimation
- · Worker (oral)

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

The exposure estimation was carried out in accordance with ECETOC TRA.

· Worker (dermal)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

(Contd. on page 9)





Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 8)

- · Consumer Not relevant for this Exposure Scenario.
- · 4 Guidance for downstream users No further relevant information available.

(Contd. on page 10)



Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 9)

#### **Annex: Exposure scenario 2**

- · 1 Short title of the exposure scenario Laboratory use
- · Sector of Use

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

- · Process category PROC15 Use as laboratory reagent
- · Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

• Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet.

- · 2 Conditions of use
- · Duration and frequency 8hrs (full working shift).
- · Physical parameters

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

- · Physical state Fluid
- · Concentration of the substance in the mixture Raw material.
- · Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- · Other operational conditions affecting worker exposure

Ensure adequate ventilation, especially in closed rooms.

Assumes use at not more than 20 °C above ambient temperature, unless stated differently.

Avoid contact with eyes.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

- · Other operational conditions affecting consumer exposure Keep out of the reach of children.
- · Risk management measures
- · Worker protection
- · Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

· Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

· Personal protective measures

Take care of good cleanliness and tidiness.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Tightly sealed goggles

· Measures for consumer protection

Ensure adequate labelling.

Keep locked up and out of the reach of children.

- Environmental protection measures
- · Water No special measures required.
- · Disposal measures

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

- · 3 Exposure estimation
- · Worker (oral)

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

The exposure estimation was carried out in accordance with ECETOC TRA.

· Worker (dermal)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

(Contd. on page 11)





Printing date 30.07.2018 Revision: 09.01.2018

Trade name: 2-Propanol, dried (max. 0,01% H2O), reagent grade, ACS, ISO

(Contd. of page 10)

- · Consumer Not relevant for this Exposure Scenario.
- · 4 Guidance for downstream users No further relevant information available.