

Randers Kemiske Industri

Safety data sheet

Prepared 18-04-2012
Revision: (date) 09-10-2024
SDS version 2.1

ITEM 1: Identification of the substance/mixture and of the company/company

1.1. Product identifier

Trade name: Alcohol - Cleaning alcohol
Product no.: 925.001/-005/-015/-210
UFI: MQNA-KVEA-E20Q-F5AD

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

Recommended uses:

For degreasing, cleaning etc
Dosage: As needed and the nature of the task.

Uses advised against:

May only be used as described above, other uses must be made in consultation with the supplier.

1.3. Details of the supplier of the safety data sheet *Company name and address:*

Randers Chemical Industry A/S
Kristrupvej 158
DK-8960 Randers SØ
Tel.: 86 41 10 22
Fax. 86 41 11 45
www.kimiljo.dk

Contact person and email:

post@kimiljo.dk

The safety data sheet has been prepared and validated by:

Mediator ApS, Centervej 2, 6000 Kolding. Consultant: DH

1.4. Emergency

telephone line: +45 82 12 12 12

ITEM 2: Hazard identification

2.1. Classification of the substance or mixture CLP

(1272/2008):

Flam. Liq. 2;H225 Eye
irritation. 2; H319
STOT SEE 3;H336

Wording of H-phrases - see below in point 16.

2.2. Marking elements



Signal word:

Danger

Highly flammable liquid and vapor. (H225)

Causes serious eye irritation. (H319)

May cause drowsiness or dizziness. (H336)

Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Smoking prohibited. (P210)

Wear protective gloves/eye protection/face protection. (P280)

In case of persistent eye irritation: Seek medical attention. (P337 + P313)

Store in a well-ventilated place. Keep container tightly closed. (P403 + P233)



Safety data sheet

2.3. Other dangers

The product contains organic solvents. Repeated exposure to organic solvents can damage the central nervous system and internal organs, such as liver and kidneys.

Other marking:

-

Other

The product does not meet the criteria for PBT or vPvB.

SECTION 3: Composition of/information on ingredients

3.1/3.2. Substances / Mixtures

| Ingredient | Index no. / REACH Reg. no. | CAS no. | EC no. | CLP classification | wt/wt % | Note |
|-------------|--|---------|-----------|---|--------------|------|
| Ethanol | 603-002-00-5 / 01- 2119457610-43- xxxx | 64-17-5 | 200-578-6 | Flam. Liq. 2;H225, Eye irritation. 2; H319 | 70 - 90 1, 2 | |
| Propan-2-ol | 603-117-00-0 / 01- 2119457558-25- xxxx | 67-63-0 | 200-661-7 | Flam. Liq. 2;H225, Eye irritation. 2;H319, STOT SEE 3;H336 | 15 - 30 1 | |

- 1) The substance is included on the Norwegian Working Environment Authority's list of organic solvents.
- 2) Specific concentration limits.

Wording of H-phrases - see below in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures *Inhalation:*

Seek fresh air.
Keep the casualty under supervision.

Seek medical attention in case of discomfort.

Intake:

Rinse your mouth thoroughly and drink 1-2 glasses of water in small sips.
Do not induce vomiting.

Seek medical attention in case of discomfort.

Skin contact:

Remove contaminated clothing.

Wash the skin with soap and water.
Consult a doctor in case of persistent discomfort.

Eye contact:

If the product gets into the eyes, rinse with water (preferably from eyewash) until the irritation ceases. Seek medical attention if irritation persists.

Combustion:

Rinse with water until the pain stops. Remove clothing that has not been burned - seek medical advice/hospital, if possible continue rinsing until the doctor takes over the treatment.

Other information:

When consulting a doctor, bring the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed

Irritating effects: The product contains substances that are local irritants in case of skin/eye contact or inhalation. Contact with local irritants can result in the contact area becoming more exposed to the absorption of harmful substances such as allergens.
May cause drowsiness or dizziness.

4.3. Indication of immediate medical attention and special treatment needed Show this safety data sheet to doctor or emergency department.



Safety data sheet

SECTION 5: Fire fighting

5.1. Extinguishing media

Extinguish with powder, foam, carbonic acid or water mist.

Do not use a water jet as this can spread the fire.

5.2. Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.

Avoid inhalation of vapors and fumes - seek fresh air.

Can develop health-hazardous flue gases with carbon monoxide in the event of a fire.

In case of fire, thick black smoke will be produced.

Exposure to decomposition products can cause health damage.

5.3. Instructions for firefighters

If there is a risk of exposure to vapors and flue gases, air-supplied respiratory protection must be worn.

SECTION 6: Precautions against accidental release

6.1. Personal safety measures, personal protective equipment and emergency procedures

Use personal protective equipment - see section 8.

Avoid static electricity.

Avoid inhalation and contact with skin and eyes.

6.2. Environmental protection measures

Avoid unnecessary release to the environment.

6.3. Methods and equipment for containment and cleaning

Spills are contained and collected with sand or other absorbent non-combustible material and transferred to suitable waste containers.

Rinse afterwards with water.

6.4. Reference to other points

See point 8 for type of protective equipment.

See point 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See under point 8 for information on precautions for use and personal protective equipment.

The product should be used in well-ventilated conditions.

There should be access to running water and eyewash.

Smoking and use of open flames prohibited.

There may be additional requirements for ventilation and protective equipment, see executive order on work with code-numbered products.

7.2. Conditions for safe storage, including any incompatibility

The product should be stored securely, out of the reach of children and not together with food, feed, medicines etc.

Should be stored in tightly closed original packaging.

Must be stored in a dry, cool and ventilated place.

Store fireproof. The National Emergency Management Agency's technical regulations for flammable liquids must be strictly followed, including the rules for flammable storage.

Fire hazard class and storage

Fire hazard class I-2, one storage unit = 1 liter.

A maximum of 25 units may be stored without the approval of the fire authorities. Please note that there may be relaxations, cf. pt. 3.1.2. in the Ministry of Defence's Executive Order no. 1639 of 6/12/2016 on flammable and combustible liquids.

7.3. Special uses

See use section 1.

SECTION 8: Exposure controls/personal protective equipment

8.1. Control parameters

Limit values according to executive order no. 291 of 19/03/2024 on limit values for substances and materials (chemical agents) in the working environment:

| Content Short-term | 8-hour | | Note |
|--------------------|-------------------------|-------------------------|------|
| | limit value | limit value | |
| | ppm / mg/m ³ | ppm / mg/m ³ | |
| Ethanol | 1000 / 1900 | 2000 / 3800 | - |
| Propan-2-ol | 200 / 490 | 400 / 980 | - |

Randers Kemiske Industri

Safety data sheet

DNEL/PNEC values:

DNEL Ethanol

| | Workers | Consumers |
|-------------------------------|------------------------------------|-----------------------|
| Inhalation - Chronic Systemic | 380 mg/ m ³ 8238 mg/ | 114 mg/m ³ |
| Dermal - Chronic Systemic | kg bw/day | - |

DNEL Propan-2-ol

| | Workers | Consumers |
|-------------------------------|------------------------------------|-----------------------|
| Inhalation - Chronic Systemic | 500 mg/ m ³ 1000 mg/ | 89 mg/m ³ |
| Inhalation - Acute Systemic | m ³ 888 mg/kg | 178 mg/m ³ |
| Dermal - Chronic Systemic | bw/day | 319 mg/kg bw/day |
| Oral - Chronic Systemic | - | 26 mg/kg bw/day |

PNEC Ethanol

| | |
|------------------------------------|--------------------|
| Fresh water | 0.96 mg/L |
| Intermittent releases (Freshwater) | 2.75 mg/L |
| Sea water | 0.79 mg/L |
| Land | 0.63 mg/kg soil dw |

8.2. Exposure controls There is no exposure scenario for this product.

Appropriate exposure control measures:

Use protective equipment as indicated below.
Wash hands before breaks, toilet visits and after finishing work.
Do not eat, drink or smoke while using this product.

Personal protective equipment:



Respiratory protection:

Usually not required.
Use respirator with A2/P2 filter in case of insufficient ventilation.

Protection of hands:

Use protective nitrile rubber gloves (>0.11 mm). Protective gloves must comply with EN 374.
Penetration time: > 480 min. (Class 6).

Eye/ face protection:

Use protective glasses if there is a risk of splashing in the eyes.

Protection of skin:

Not required.

Measures to limit environmental exposure:

It must be ensured that local regulations for discharge are observed.



Safety data sheet

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical form Color: Odor:

| | |
|--|------------------|
| Melting point/ | Liquid |
| Freezing | Colorless |
| point | Alcohol |
| (°C): Boiling point or initial boiling point | -114 |
| and boiling range (°C): Flammability: Lower and upper explosion limit (vol-%): Flash point | 78-82 |
| (°C): Autoignition | - |
| temperature (°C): Decomposition temperature (°C): pH: | - |
| Kinematic viscosity | 13 |
| (mm ² /s): Solubility: Partition coefficient n- | >350 |
| octanol/water (log value): Vapor | - |
| pressure: Density and/or relative density: | - |
| Relative vapor | Soluble in water |
| density: Particle properties: | - |
| | 0.78 |
| | - |
| | - |

9.2. Other information

No.

SECTION 10: Stability and reactivity

10.1. Reactivity No

data.

10.2. Chemical stability The

product is stable when used according to the supplier's instructions.

Flammable at temperatures above the flash point.

10.3. Risk of dangerous reactions

Vapors and air can form explosive mixtures.

10.4. Conditions to avoid Avoid

heating and contact with sources of ignition.

10.5. Materials to avoid

Avoid contact with strong bases.

Avoid contact with strong oxidizing agents.

Avoid contact with strong reducing agents.

Avoid contact with strong acids.

10.6. Hazardous decomposition products

In case of fire or strong heating, the product decomposes and dangerous gases such as COx can be formed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) no. 1272/2008

Acute toxicity:

The database does not give rise to classification.

| Substance | Exposure route | Art | Testing | Result |
|-------------|----------------|--------|---------------|----------------|
| Ethanol | Oral | Rat | LD50 | 10470 mg/kg bw |
| Ethanol | Inhalation | Rat | LC50/ 4 Hours | 116.9 mg/L air |
| Propan-2-ol | Oral | Rat | LD50 | 5.84 g/kg bw |
| Propan-2-ol | Inhalation | Rat | LC50/ 6 Hours | > 10000 ppm |
| Propan-2-ol | Dermal | Rabbit | LD50 | 16.4 mL/kg bw |

Skin corrosion/irritation:

May be irritating to the skin - may cause redness.

Serious eye damage/eye irritation:

Irritating to the eyes. Causes burning and tearing.

Respiratory sensitization or skin sensitization:

The database does not give rise to classification.



Safety data sheet

Germ cell mutagenicity:

The database does not give rise to classification.

Carcinogenicity:

The database does not give rise to classification.

Reproductive toxicity:

The database does not give rise to classification.

Single STOT exposure:

May cause drowsiness or dizziness.

The product emits vapors from organic solvents that can cause drowsiness and dizziness. In high concentrations, the vapors can cause headaches and intoxication.

Repeated STOT exposures:

Prolonged or repeated inhalation of vapors can cause damage to the central nervous system.

Aspiration hazard:

The database does not give rise to classification.

11.2. Information on other hazards

Test data not available.

SECTION 12: Environmental information**12.1. Toxicity**

| Substance | Duration of the test | Art | Testing | Result |
|-------------|----------------------|---------|---------|--------------|
| Ethanol | 96 Hours | Fish | LC50 | 15.3 g/L |
| Ethanol | 48 hours | Daphnia | LC50 | 5012 mg/L |
| Ethanol | 72 hours | Algae | EC50 | 275 mg/L |
| Propan-2-ol | 96 Hours | Fish | LC50 | 9640 mg/L |
| Propan-2-ol | 24 Hours | Daphnia | LC50 | > 10000 mg/L |

12.2. Persistence and degradability

| Substance | Degradability in the aquatic environment | Testing | Result |
|-------------|--|---------------|------------|
| Ethanol | Yes | BOD | 5 days 74% |
| Propan-2-ol | Yes | EU Method C.5 | 5 days 53% |

12.3. Bioaccumulative potential

| Substance | Potentially bioaccumulative | LogPow |
|-----------|-----------------------------|--------|
| Ethanol | No | -0.35 |

12.4. Mobility in soil

Test data not available.

12.5. Results of PBT and vPvB assessment

The product does not meet the criteria for PBT or vPvB.

12.6. Hormone-disrupting properties

Test data not available.

12.7. Other adverse effects

None.

SECTION 13: Disposal**13.1. Methods for waste treatment**

The product is covered by the regulations on hazardous waste.

Spills and waste are collected in closed and tight containers, which are disposed of via the municipal waste scheme for hazardous waste with the specifications below.

| EAK code | Description | Chemical waste group |
|----------|-------------------------------------|----------------------|
| 14 06 03 | Other solvents and solvent mixtures | C |



Safety data sheet

Special marking:

-

Contaminated packaging:

Empty packaging and residues must be handed over to the municipal waste scheme for hazardous waste.

SECTION 14: Transport information

The product is covered by the conventions on dangerous goods.

14.1 - 14.4.**ADR**

| 14.1. UN number or ID number 1987 | 14.2. UN proper shipping name | 14.3. Transport hazard class(es) | 14.4. Packaging group |
|-----------------------------------|--------------------------------------|----------------------------------|-----------------------|
| | ALCOHOLS, NOS (Ethanol, propan-2-ol) | 3 | II |

IMDG/IATA

| 14.1. UN number or ID number 1987 | 14.2. UN proper shipping name | 14.3. Transport hazard class(es) | 14.4. Packing group |
|-----------------------------------|--------------------------------------|----------------------------------|---------------------|
| | ALCOHOLS, NOS (Ethanol, propan-2-ol) | 3 | II |

14.5. Environmental hazards

-

14.6. Special precautions for the user

-

14.7. Bulk transport by sea according to IMO instruments

Not relevant.

SECTION 15: Information on regulation**15.1. Special regulations/specific legislation for the substance or mixture with regard to safety, health and the environment****Sources:**

The Norwegian Working Environment Authority's order no. 301 of 13 May 1993 on determining code numbers, with later amendments.

Order on work with substances and materials (chemical agents) - BEK no. 381 of 12/04/2023, with subsequent amendments.

The Norwegian Working Environment Authority's order no. 1049 of 30 May 2021 on youth work, with later amendments.

Executive order no. 1369 of 25 November 2015 on marketing and labeling of volatile organic compounds in certain paints and varnishes as well as products for car refinishing.

Executive order no. 1565 of 19 December 2022 on the import and sale of highly toxic and toxic substances and mixtures, etc., on the storage and reporting of theft of certain substances and mixtures and on the prohibition of misleading statements when marketing substances and mixtures.

Executive order no. 6 of 4 January 2023 of the Chemicals Act.

Executive order no. 1794 of 18/12/2015 on special duties for manufacturers, suppliers and importers etc. of substances and materials under the Act on the Working Environment, with subsequent amendments.

Executive order no. 291 of 19/03/2024 on limit values for substances and materials (chemical agents) in the working environment, with subsequent amendments.

Executive order no. 573 of 23/05/2024 on waste, with later amendments.

Other marking:

PR number: 2401212

MAL Code (1993):

3-1

Limitations of use:

Young people under the age of 18 may not professionally use or be exposed to the product. However, young people over the age of 15 are exempt from this rule if the product is included as a necessary part of an education. (cf., however, the Norwegian Working Environment Authority's Executive Order on youth work).

During a workplace assessment, it must be ensured that employees are not exposed to influences that could entail a risk during pregnancy or breastfeeding (cf. BEK no. 1839 of 14/12/2023 on the performance of the work).

Requirements for special education:

-

15.2. Chemical Safety Assessment

No.



Safety data sheet

SECTION 16: Other information

Prepared on the basis of EU regulation 1907/2006 (REACH)

Other information:

Sources:

EU regulation no. 1907/2006 (REACH), with later adaptations.

EU regulation no. 1272/2008 (CLP), with later adaptations.

Directive 2008/98/EC

ECHA – The European Chemicals Agency.

The full wording of H sentences referred to in points 2+3:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Classification according to Regulation (EC) no. 1272/2008:

Flam. Liq. 2;H225 Based on experimental data

Eye irritation. 2;H319 Calculation method

STOT SE 3;H336 Calculation method

Abbreviations and acronyms used in the safety data sheet: REACH:

Registration, assessment and approval of and restrictions on chemicals. Regulation (EC) no. 1907/2006.

CLP: Regulation (EC) no. 1272/2008 on classification, labeling and packaging.

CAS No.: Chemical Abstracts Service number.

EC no.: EINECS and ELINCS number (see also EINECS and ELINCS).

DNEL: Derived No-Effect Level (Derived No-Effect Level).

PNEC: Predicted No Effect Concentration (Predicted No Effect Concentration).

STOT: Specific Target Organ Toxicity (Specific Target Organ Toxicity).

LD50: Lethal Dose for 50% of a test population.

LC50: Lethal concentration for 50% of a test population.

EC50: The effective substance concentration that causes 50% of the maximum response.

PBT: Persistent, Bioaccumulative and Toxic substance (Persistent, Bioaccumulative and Toxic).

vPvB: Very persistent and very bioaccumulative (Very Persistent and Very Bioaccumulative).

NOEC: The highest tested concentration where, in a study, no statistically significant effect is observed in the exposed population compared to an appropriate control group (No Observed Effect Concentration).

NOAEL: The highest tested dose or the highest tested exposure level at which no statistically significant increases in the frequency or severity of adverse effects occur between the exposed population and an appropriate control group. Some effects may occur at this level, but they are not considered harmful or precursors of harmful effects.

Other:

The information in this safety data sheet only applies to the product mentioned in point 1 and is not necessarily valid when used together with other products.

Changes have been made in the following points:

General update.

This safety data sheet replaces version:

2.0