

Safety Data Sheet

acc. to OSHA HCS


Printing date 08/26/2019

Reviewed on 07/26/2019

1 Identification

- **Product identifier**
- **Trade name:** LP289/99
- **Article number:** 1000757002000
- **Application of the substance / the mixture** Antistatik-Kühlmittel
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Riepe GmbH & Co. KG
Theodor Rosenbaum Str. 28-30
32257 Bünde - Deutschland
Tel.: +49 (0) 5223 - 687407-0
Fax: +49 (0) 5223 - 687407-50
E-Mail: info@riepe.eu
- **Information department:**
Tel.: +49 (0) 5223 - 687407-0
E-mail: info@riepe.eu
- **Emergency telephone number:**
Poison Control Center, Mainz
Tel. 00 49 / 61 31 / 19 240

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 3 H226 Flammable liquid and vapor.
Eye Irrit. 2A H319 Causes serious eye irritation.
Carc. 1A H350 May cause cancer.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**


GHS02 GHS07 GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:**
ethanol
- **Hazard statements**
Flammable liquid and vapor.
Causes serious eye irritation.
May cause cancer.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves / eye protection / face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

- Classification system:

- NFPA ratings (scale 0 - 4)

Health = 2

Fire = 3

Reactivity = 0

- HMIS-ratings (scale 0 - 4)

Health = *2

Fire = 3

Reactivity = 0

- Other hazards

- Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- **Description:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

- Dangerous components:

64-17-5	ethanol	50-100%
67-63-0	propan-2-ol	2.5-10%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of first aid measures

- **General information:** Immediately remove any clothing soiled by the product.

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

- After skin contact:

Verschmutzte Kleidung sofort ausziehen. Benetzte Stellen mit viel Wasser und Seife waschen. Arzt hinzuziehen, wenn Reizung anhält.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

If symptoms persist consult doctor.

- Information for doctor:

- Most important symptoms and effects, both acute and delayed

No further relevant information available.

- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures. In case of incomplete combustion carbon monoxide can arise. Fumes are heavier than air and distributed over ground. Inflammation is possible from a far distance.
- **Advice for firefighters**
- **Protective equipment:**
See section 8.
Wear self-contained respiratory protective device.
- **Additional information**
Endangered containers in the surrounding area should be cooled with a water-hose.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment and keep unprotected persons away.
Extinguish naked flames. Remove flammable sources. No smoking. Avoid sparks. Avoid contact with skin, eyes and clothing. Avoid inhalation of fumes. Air contaminated rooms thoroughly. Protect against electrostatic sparks.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
In case of release of larger quantities inform competent authorities.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

- PAC-1:

64-17-5	ethanol	1,800 ppm
67-63-0	propan-2-ol	400 ppm
78-93-3	METILETILCETONA (MEK)	200 ppm
102-71-6	Triethanolamine	15 mg/m ³
124-68-5	2-amino-2-methylpropanol	17 mg/m ³
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	1.9 mg/m ³

- PAC-2:

64-17-5	ethanol	3300* ppm
67-63-0	propan-2-ol	2000* ppm
78-93-3	METILETILCETONA (MEK)	2700* ppm
102-71-6	Triethanolamine	240 mg/m ³
124-68-5	2-amino-2-methylpropanol	190 mg/m ³
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	21 mg/m ³

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- PAC-3:		
64-17-5	ethanol	15000* ppm
67-63-0	propan-2-ol	12000** ppm
78-93-3	METILETILCETONA (MEK)	4000* ppm
102-71-6	Triethanolamine	1,500 mg/m ³
124-68-5	2-amino-2-methylpropanol	570 mg/m ³
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolid	130 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
Protect against direct sunlight, other sources of heat and ignition.
Store in cool, dry conditions in well sealed receptacles.
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storage and handling of water hazardous substances
Store in a cool location.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
Pay attention to regulations/technical rules for the storage of combustible liquids.
- **Storage class:** 3 (VCI - Konzept, 2007)
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**
Raumlüftung bzw. Absaugung. Maßnahmen gegen elektrostatische Aufladung.
- **Control parameters**

- Components with limit values that require monitoring at the workplace:

64-17-5 ethanol	
PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm
67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI

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- Ingredients with biological limit values:
67-63-0 propan-2-ol

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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- Additional information: The lists that were valid during the creation were used as basis.

- 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 and skin.
Gases, fumes and aerosols should not be inhaled.

- Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

- Recommended filter device for short term use:

Filter AX
(EN 14387)

- Protection of hands:

Solvent resistant gloves
(EN 374)

- Material of gloves

Butylrubber, BR, recommended thickness of the material: ≥ 0.7 mm, penetration time: ≥ 480 min.
Fluorocarbon rubber (Viton), recommended thickness of the material: ≥ 0.7 mm, penetration time: ≥ 480 min.

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 Change gloves if notice sign of disenchantment.

- Eye protection:

Tightly sealed goggles
(EN 166)

- Body protection:

Standard protective clothing. Chemical resistant safety-shoes or boots. If skin contact is possible, wear impenetrable protective clothing against this solvent.
(EN 368)

9 Physical and chemical properties

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

Form:	Fluid
Color:	Blue
- Odor:	Alcohol-like

- pH-value at 20 °C (68 °F):	10.3
- Melting point/Melting range:	Undetermined.
- Boiling point/Boiling range:	> 75 °C (>167 °F)

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- Flash point:	23.5 °C (74.3 °F)
- Ignition temperature:	425 °C (797 °F) Wert für Ethanol.
- Auto igniting:	Product is not selfigniting.
- Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- Explosion limits:	
Lower:	4.8 Vol % (determined (EN 1839))
Upper:	15 Vol % (ethanol)
- Vapor pressure at 20 °C (68 °F):	~ 50 hPa (~37.5 mm Hg)
- Density at 20 °C (68 °F):	0.870 g/cm ³ (7.26 lbs/gal)
- Solubility in / Miscibility with Water:	Soluble.
- Solvent content:	
VOC content:	45.0 %
- Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** strong oxidizing agents
- **Hazardous decomposition products:** Bei Brand Bildung von Kohlenmonoxid CO und Kohlendioxid CO₂.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC 50 / 4 h	>50 mg/l (rat) (OECD 403) >20 mg/l (mouse)

67-63-0 propan-2-ol

Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit) 13,400 mg/kg (rab)
Inhalative	LC 50 / 4 h	30 mg/l (rat)

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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0	propan-2-ol	3
102-71-6	Triethanolamine	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

64-17-5 ethanol

LC 50 / 48 h	8,140 mg/l (Leuciscus idus)
EC 50 / 48 h	>10,000 mg/l (Daphnia magna)
EC 50 / 72 h	275 mg/l (Chlorella vulgaris) (OECD 201)

67-63-0 propan-2-ol

LC 50 / 48 h	>100 mg/l (Leuciscus idus)
EC 50 / 48 h	>100 mg/l (Daphnia magna)
EC 50 / 72 h	>100 mg/l (Scenedesmus subspicatus)

- **Persistence and degradability**

Easily biodegradable

Das Produkt ist biologisch leicht abbaubar.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Bacteria inhibition EC 20 (mg/l according to ISO 8192 B):**

64-17-5 ethanol

EC 50 (static)	>100 mg/l (Chlorella pyrenoidosa) (OECD 201)
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- **Additional ecological information:**

- **General notes:**

Do not allow to enter drainage system, surface or ground water

Water hazard class 1 (Self-assessment): slightly hazardous for water

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. If possible, send to be recycled, otherwise burn or deposit in a certified facility.

- **Waste disposal key:**

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

- **Uncleaned packagings:** Disposal must be made according to official regulations.

- **Recommendation:**

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

Caution: Leftovers in the containers may cause the risk of explosion.

Uncleaned containers should not be perforated, cut or welded.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- UN-Number	
- DOT, ADR, IMDG, IATA	UN1987
- UN proper shipping name	
- DOT	Alcohols, n.o.s. (Isopropanol, Ethanol)
- ADR	1987 Alcohols, n.o.s. (Isopropanol, Ethanol)
- IMDG	ALCOHOLS, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL))
- IATA	ALCOHOLS, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL)
- Transport hazard class(es)	
- DOT, IMDG, IATA	
- Class	3 Flammable liquids
- Label	3
- ADR	
- Class	3 (F1) Flammable liquids
- Label	3
- Packing group	
- DOT, ADR, IMDG, IATA	III
- Environmental hazards:	Not applicable.
- Marine pollutant:	No
- Special precautions for user	Warning: Flammable liquids

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- Danger code (Kemler):	30
- EMS Number:	F-E,S-D
- Stowage Category	A
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- Transport/Additional information:	
- ADR	
- Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- IMDG	
- Limited quantities (LQ)	5L
- Excepted quantities (EQ)	Código E4 cantidad neta máxima por envase interior: 30ml. Cantidad neta máxima por embalaje exterior: 500 ml.
- UN "Model Regulation":	UN 1987 ALCOHOLS, N.O.S. (ISOPROPANOL, ETHANOL), 3, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **TSCA (Toxic Substances Control Act):**

64-17-5	ethanol
67-63-0	propan-2-ol
78-93-3	METILETILCETONA (MEK)
102-71-6	Triethanolamine
124-68-5	2-amino-2-methylpropanol
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide
7732-18-5	water, distilled, conductivity or of similar purity

- **National regulations:**

- **Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

- **VOC:**

60% volatile organic compounds (Swiss Ordinance on the Incentive Tax on Volatile Organic Compounds).

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Relevant phrases**

Complete wording of hazard statements and risk phrases (H- and R-phrases) mentioned in section 3. These phrases refer to the constituents. The labelling for this product is stated in section 2.

- **Department issuing SDS:** see item 1: Informing department

- **Date of preparation / last revision** 08/26/2019 / 105

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- 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

LEV: Local Exhaust Ventilation

RPE: Respiratory Protective Equipment

RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)

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

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organisation for Standardisation

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 1A: Carcinogenicity – Category 1A