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1 Identification

- Product identifier

- Trade name: LPZ/II

- 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. 2 H225 Highly 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

Highly 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.

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.

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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%

- 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; immediately call for medical help.

- 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.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- 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.

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- Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device.

See section 8.

- 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:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

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).

Ensure adequate ventilation.

Contaminated material has to be disposed as waste (see item 13).

- 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		
78-93-3	METILETILCETONA (MEK)	200 ppm		
- PAC-2:				
64-17-5		3300* ppm		
78-93-3	METILETILCETONA (MEK)	2700* ppm		
- PAC-3:	- PAC-3:			
64-17-5		15000* ppm		
78-93-3	METILETILCETONA (MEK)	4000* ppm		

7 Handling and storage

- Handling:

- Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes or skin.

- 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.

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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 harzardous substances

- 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/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1880 mg/m³. 1000 ppm

- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

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:

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Recommended filter device for short term use: Combination filter A-P2
- Protection of hands: Solvent resistant gloves
- 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.

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
- Body protection:

Standard proctective clothing. Chemical resistant safety-shoes or boots. If skin contact is possible, wear inpenetrable protective clothing against this solvent.

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9 Physical and chemical properties

- Information on basic physical and chemical properties					
- General Information					
- Appearance:	I tourist				
Form: Color:	Liquid Colorless				
- Odor:	Alcohol-like				
- Odor threshold:	Not determined.				
- pH-value: - Melting point/Melting range:	Not determined. ~ -100 °C (212 °F)				
- Boiling point/Boiling range:	≥ 78 °C (≥172.4 °F)				
- Flash point:	~13 °C (~55.4 °F)				
- Flammability (solid, gaseous):	Not applicable.				
- Ignition temperature:	425 °C (797 °F)				
igion tomporataro.	Wert für Ethanol.				
- Decomposition temperature:	Not determined.				
- 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:	3.5 Vol %				
Upper:	15.0 Vol %				
	Wert für Ethanol.				
- Vapor pressure at 20 °C (68 °F):	~ 57 hPa (~42.8 mm Hg)				
- Density at 20 °C (68 °F):	~ 0.79 g/cm³ (~6.593 lbs/gal)				
- Relative density	Not determined.				
- Vapor density	Not determined.				
- Evaporation rate	Not determined.				
- Solubility in / Miscibility with					
Water:	Partly miscible.				
- Partition coefficient (n-octanol/water): Not determined.				
- Viscosity:					
Dynamic:	Not determined.				
Kinematic:	Not determined.				
- Solvent content:					
VOC content:	43.3 %				
- 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.

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Zu vermeiden: Wärme, Flammen, Funken

- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials:

strong oxidizing agents

Aluminium, Zink und andere Leichtmetalle.

- Hazardous decomposition products: Bei Brand Bildung von Kohlenmonoxid CO und Kohlendioxid CO2.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Subacute to chronic toxicity: Bei chronischer Einwirkung sind Leberschäden möglich.
- Additional toxicological information:
- Carcinogenic categories
- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- 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: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 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.

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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.

4 Transport information	
- UN-Number - DOT, ADR, IMDG, IATA	UN1170
- UN proper shipping name - DOT - ADR - IMDG - IATA	Ethanol solutions 1170 ETHANOL SOLUTION (ETHYL ALCOHO) SOLUTION) ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) ETHANOL SOLUTION
- Transport hazard class(es)	
- DOT, IMDG, IATA - Class - Label	3 Flammable liquids 3
- ADR - Class - Label	3 (F1) Flammable liquids 3
- Packing group - DOT, ADR, IMDG, IATA	II .
- Environmental hazards: - Marine pollutant:	Not applicable. No
- Special precautions for user - Danger code (Kemler): - EMS Number:	Warning: Flammable liquids 33 F-E,S-D
- Transport in bulk according to Annex MARPOL73/78 and the IBC Code	I l of Not applicable.
- Transport/Additional information:	
- ADR - Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

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- IMDG - Limited quantities (LQ) - Excepted quantities (EQ)	1L Código E4 cantidad neta máxima por envase interior: 30ml. Cantidad neta máxima por embalaje exterior: 500 ml.
- UN "Model Regulation":	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

- Hazardous Air Pollutants

None of the ingredients is listed.

- National regulations:
- Information about limitation of use:

Employment restrictions concerning young persons must be observed.

- VOC

96% 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 08/28/2019 / 104
- Abbreviations and acronyms:

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)

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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Flam. Liq. 2: Flammable liquids – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A Carc. 1A: Carcinogenicity – Category 1A

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