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LIQUIDE RESINE KM BACK - 04062

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : LIQUIDE RESINE KM BACK Product code : 04062.

LIQUID RESIN KM-BACK / HARTER KM-BACK

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

Resin coating

1.3. Details of the supplier of the safety data sheet

Registered company name : PRESI S.A. Address : 11 Rue du vercors.38320.EYBENS.France. Telephone : +33 (0)4.76.72.00.21. Fax : +33 (0)4.76.72.05.84. presi@presi.com www.presi.com

1.4. Emergency telephone number : +33 (0)1.45.42.59.59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS02



GHS07

| | IETHYL METHACRYLATE ,N-BIS(2-HYDROXYETHYL)-P-TOLUIDINE |
|----------------------------|--|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H335 | May cause respiratory irritation. |
| Precautionary statements - | Prevention : |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P241 | Use explosion-proof [electrical/ventilating/lighting/]equipment. |



| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. | | | | | |
|---------------------------------------|--|--|--|--|--|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | | | | | |
| Precautionary statements - Response : | | | | | | |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. | | | | | |
| Precautionary statements - Storage : | | | | | | |
| P403 + P235 | Store in a well-ventilated place. Keep cool. | | | | | |
| P405 | Store locked up. | | | | | |
| 12 Other haranda | | | | | | |

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Composition : | | | |
|------------------------------------|---------------------|------|-----------------------|
| Identification | (EC) 1272/2008 | Note | % |
| CAS: 80-62-6 | GHS07, GHS02 | D | $50 \le x \% \le 100$ |
| EC: 201-297-1 | Dgr | [1] | |
| REACH: 01-2119452498-28 | Flam. Liq. 2, H225 | | |
| | Skin Irrit. 2, H315 | | |
| METHYL METHACRYLATE | Skin Sens. 1, H317 | | |
| | STOT SE 3, H335 | | |
| CAS: 3077-12-1 | GHS07 | | $2.5 \le x \% \le 10$ |
| EC: 221-359-1 | Wng | | |
| | Acute Tox. 4, H302 | | |
| N,N-BIS(2-HYDROXYETHYL)-P-TOLUIDIN | Skin Irrit. 2, H315 | | |
| E | Eye Irrit. 2, H319 | | |
| | STOT SE 3, H335 | | |

(Full text of H-phrases: see section 16)

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

Rinse immediately with plenty of water, also under the eyelids

Consult a physician if necessary

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.



In the event of swallowing :

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

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

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- carbon dioxide (CO2)

- dry sand
- powder

Unsuitable methods of extinction

- In the event of a fire, do not use :
- water

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.



6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Handle in well-ventilated areas.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged : always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in the original container at a temperature not exceeding 25°C

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

| CAS | VME-mg/m3: | VME-ppm : | VLE-mg/m3: | VLE-ppm : | Notes : |
|---------|------------|-----------|------------|-----------|---------|
| 80-62-6 | - | 50 | - | 100 | - |



- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) : CAS TWA: STEL: Ceiling : Definition : Criteria : 80-62-6 50 ppm SEN; A4 100 ppm - Germany - AGW (BAuA - TRGS 900, 29/01/2018) : VME : CAS VME : Excess Notes 50 ppm 80-62-6 2(I) 210 mg/m³ - Canada / Ontario (Control of exposure to biological or chemical agents, regulation 491/2009) : CAS TWA: STEL: Ceiling : Definition : Criteria : 80-62-6 50 ppm 100 ppm Canada / Quebec (Regulations on occupational health and safety) : CAS TWA: STEL: Ceiling : Definition : Criteria : 80-62-6 50 ppm S 205 mg/m3 - France (INRS - ED984 :2016) : CAS VME-mg/m3 : VLE-ppm : VLE-mg/m3: TMP No : VME-ppm: Notes : 80-62-6 205 100 410 82 50 - Japan (JSOH, 11/05/2017) : CAS TWA: STEL: Definition : Ceiling : Criteria : 80-62-6 8,3 mg/m³ Switzerland (SUVAPRO 2017): VLE Valeur plafond Notations CAS VME 80-62-6 50 ppm 100 ppm S SSC 210 mg/m³ 420 mg/m³ USA / NIOSH IDLH (National Institute for Occupational Safety and Health, Immediately Dangerous to Life or Health Concentrations) : CAS TWA: STEL: Ceiling : Definition : Criteria : 80-62-6 100 ppm 410 mg/m3 - UK / WEL (Workplace exposure limits, EH40/2005, 2011) : CAS TWA : STEL: Ceiling : Definition : Criteria : 50 ppm 80-62-6 100 ppm 208 mg/m³ 416 mg/m³ Derived no effect level (DNEL) or derived minimum effect level (DMEL): METHYL METHACRYLATE (CAS: 80-62-6) Workers. Final use: Exposure method: Dermal contact. Potential health effects: Long term systemic effects. DNEL: 17 mg/kg body weight/day Exposure method: Inhalation. Potential health effects: Long term systemic effects. DNEL : 208 mg of substance/m3 Predicted no effect concentration (PNEC): METHYL METHACRYLATE (CAS: 80-62-6) Environmental compartment: Fresh water. PNEC : 0.94 mg/l 8.2. Exposure controls Personal protection measures, such as personal protective equipment



Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Butyl Rubber (Isobutylene-isoprene copolymer)

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties General information :

| General millimation . | | | |
|--|---------------|--|--|
| Physical state : | Fluid liquid. | | |
| Important health, safety and environmental information | | | |
| pH : | Not relevant. | | |
| Boiling point/boiling range : | 100.3 °C | | |
| Flash Point : | 10.00 °C. | | |
| Explosive properties, lower explosivity limit (%) : | 2.1 Vol % | | |
| Explosive properties, upper explosivity limit (%) : | 12.5 Vol % | | |
| Vapour pressure (50°C) : | Not relevant. | | |
| | | | |



| Density : | 0.944 g/cm3 (20 °C) |
|---|---------------------|
| Water solubility : | Insoluble. |
| Melting point/melting range : | Not relevant. |
| Self-ignition temperature : | Not relevant. |
| Decomposition point/decomposition range : | Not relevant. |
| % VOC : | 911.9 g/L |
| 9.2. Other information | |
| No data available. | |

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.

- heating
- heat
- flames and hot surfaces

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause an allergic reaction by skin contact.

11.1.1. Substances

Acute toxicity :

| N,N-BIS(2-HYDROXYETHYL)-P-TOLUIDIN Oral route : | E (CAS: 3077-12-1) LD50 = 300 mg/kg Species : Rat |
|--|---|
| METHYL METHACRYLATE (CAS: 80-62-6) | |
| Oral route : | LD50 > 5000 mg/kg |
| | Species : Rat |
| | OECD Guideline 401 (Acute Oral Toxicity) |
| Dermal route : | LD50 > 5000 mg/kg |
| | Species : Rabbit |
| Inhalation route (Dusts/mist) : | LC50 = 29.8 mg/l |
| · · · · · · | Species : Rat |
| | |



Duration of exposure : 4 h

| Skin corrosion/skin irritation : Irritating to skin | |
|--|--|
| Respiratory or skin sensitisation : | |
| Can cause a skin allergy | |
| 11.1.2. Mixture No toxicological data available for the mixture. | |
| | |
| SECTION 12 : ECOLOGICAL INFORMATION | |
| 12.1. Toxicity | |
| 12.1.1. Substances METHYL METHACRYLATE (CAS: 80-62-6) | |
| Fish toxicity : | LC50 > 79 mg/l |
| | Species : Oncorhynchus mykiss |
| | Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test) |
| | |
| Crustacean toxicity : | EC50 69 mg/l Species : Daphnia magna |
| | Duration of exposure : 48 h |
| | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| | NOEC = 37 mg/l |
| | Species : Daphnia magna |
| | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Algae toxicity : | ECr50 > 110 mg/l |
| | Species : Selenastrum capricornutum Duration of exposure : 72 h |
| | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | |
| 12.1.2. Mixtures No aquatic toxicity data available for the mixture. | |
| 12.2. Persistence and degradability | |
| 12.2.1. Substances | |
| METHYL METHACRYLATE (CAS: 80-62-6) | |
| Biodegradability : | no degradability data is available, the substance is considered as not degrading |
| | quickly. |
| 12.3. Bioaccumulative potential | |
| 12.3.1. Substances | |
| METHYL METHACRYLATE (CAS: 80-62-6) | |
| Octanol/water partition coefficient : | $\log \operatorname{Koe} = 1.38$ |
| 12.4. Mobility in soil | |
| No data available. | |
| 12.5. Results of PBT and vPvB assessment | |
| No data available. | |
| 12.6. Other adverse effects | |
| No data available. | |



German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 1 : Slightly hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

1247

14.2. UN proper shipping name

UN1247=METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es)





14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---------|-------|---------|----------|----------|----------|---------|---------|------|------|--------|
| | 3 | F1 | II | 3 | 339 | 1 L | 386 | E2 | 2 | D/E |
| | | | | | | | | | | |
| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ | | | |
| | 3 | - | II | 1 L | F-E,S-D | 386 | E2 | | | |
| | | | | | | | | | | |
| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ | |
| | 3 | - | II | 353 | 5 L | 364 | 60 L | A209 | E2 | |
| | 3 | - | II | Y341 | 1 L | - | - | A209 | E2 | |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.



14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Classification and labelling information included in section 2:
 - The following regulations have been used:
 - EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/669 (ATP 11)
- Container information:

No data available.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) : WGK 1 : Slightly hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

| Highly flammable liquid and vapour. |
|--------------------------------------|
| Harmful if swallowed. |
| Causes skin irritation. |
| May cause an allergic skin reaction. |
| Causes serious eye irritation. |
| May cause respiratory irritation. |
| |

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.