MATERIAL SAFETY DATA SHEET

According to regulation (EC) Nr. 1907/2006

**1 Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name: MILRITE-32

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

Uses of the

Substance/ Mixture: Industrial Use

Uses advised against: At this moment we have not identified any uses advised against.

* 1. **Details of the supplier of the safety data sheet**

Company: HPM Technologie GmbH

 Rudolf-Diesel-Straβe 3

 D-72525 Münsingen

* 1. **Details of Distributor:**

Company: Carbide Related Technologies, Inc.

 355 Sackett Point Road Unit 5

 North Haven, CT 06473

Telephone: +1 203-281-1266

Email address: sales@carbiderelatedtech.com

**1.5 Emergency telephone number**

Emergency telephone

Number: (203)281-1266

**2 Hazards identification**

**2.1 Classification of the substance or mixture**

 Classification according to regulation (EC) No. 1272/2008

|  |
| --- |
| Regulations (EC) No. 1272/2008 |
| Hazard Class Hazard category Target Organs Hazard Statements  |
| Aspiration hazard Category 1 ----- H304  |

For a full text of the H-statement mentioned in this section, see Section 16.

**2.2 Continued – Classifications according to EU Directives**

|  |
| --- |
| Directive 67/548/EEC or 199 45/EC |
| Hazard symbol/ Category of danger Risk phrases  |
| Harmful (Xn) R65 |
|  R66 |

For full text on the R-phrase mentioned in this section, see section 16.

**Most important adverse effects:**

Human Health: See section 11 for toxicological information

Physical and chemical hazards: See section 9 for physicochemical information

Potential environment effects: See section 12 for environmental information

* 1. **Label elements**

**Labeling according to Regulation EC No 1272/2008**

**Hazard symbols:**

 Signal word: Danger

 Hazard Statements: H304 may be fatal if swallowed and enters airways.

Precautionary statements

Response: P301 + P310 IF SWALLOWED: immediately call a POISION CENTER or doctor/physician.

 P331: do NOT induce vomiting

 P405: Store looked up.

 P501: Dispose of contents/container to an approved waste disposal plant.

**Additional labeling:**

 EUH066 Repeated exposure may cause skin dryness or cracking.

 **Hazardous components which must be listed on the label**:

* Hydrocarbons, C10-C13, iso-Alkanes, cyclics, <2% aromatics

**Hazardous components which must be listed on the label:**

* Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics <2% aromatics
	1. **Other hazards**

For results of PBT and vPvB assessment see section 12.5.

**3 Composition/information on ingredients**

**3.1 Mixtures**

Chemical

nature: Preparation of substances listed below with no

 hazardous additions.

|  |
| --- |
| Hazardous Components Amount% Classification Classification  (Regulations (EC) No. 1272/2008) (67/548/EWG) Hazard Class. Category Hazard Statements  |
| Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics EC-Nr: 918-317-6 Asp. Tox. 1 H304 Xn: R65; R66 Registration: 01-2119474196-32-xxxx >=50 |
| Hydrocarbons, C10- C13 n-alkanes, isoalkanes, cyclics, <2% aromatics EC-Nr: 918-481-9 Asp. Tox. 1 H304 Xn; R65, R66  |

Remarks: Benzene <0.1%

For full text on the R-phrases mentioned in this section, see section 16

For full text on the H-statements mentioned in this section, see section 16.

**4 First aid measures**

**4.1 Description of first aid measures**

General advice: Move out of dangerous area. Take off contaminated clothing immediately.

If inhaled: Move to fresh air. Oxygen, if needed. Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a physician.

If swallowed: Rinse mouth with water. DO NOT induce vomiting. Risk of aspiration! Call a physician immediately. If a person vomits when laying them on their back, place them into the recover position.

* 1. **Most important symptoms and effects, both acute and delayed**

Symptoms: Symptoms of overexposure may be headaches, dizziness, tiredness, nausea and vomiting. Inhalation can cause CNS-depression and narcosis. Will dry out skin.

Effects: Aspiration hazard if swallowed- can enter lungs and cause damage. Aspiration may cause pulmonary edema and pneumonitis.

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

Treatment: Treat symptomatically

**5 Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing

Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing

media: High volume water jet

* 1. **Special Hazards arising from the substance mixture**

Specific hazards during

firefighting: Combustible liquid. Vapors may form explosive mixtures with air. The product is insoluble and floats on water. Incomplete combustion may form toxic pyrolysis products. Fire may cause evolution of: Carbon oxides.

* 1. **Advice for firefighters**

Special protective equipment

for firefighters: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further information: Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**6 Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions: Use personal protective equipment. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapor/spray.

**6.2 Environmental precautions**

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches

 soil inform authorities responsible for such cases.

**6.3 Methods and materials for containment and cleaning up**

Methods and materials for

Containment and cleaning up: Ensure adequate ventilation. Absorb with liquid binding Material (sand, diatomite, acid binders, and universal binders). Treat recovered material as described in the section, “Disposal

 Considerations.”

**7 Handling and storage**

* 1. **Precautions for safe handling**

Advice on safe handling: Keep container tightly closed. Avoid inhalation of vapor or mist. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures: Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapors/spray. Avoid contact with the skin and the eyes. Keep away from food, drink, animal feeding stuffs. Smoking eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

* 1. **Conditions for safe storage, including any incompatibilities**

Requirements for storage

Areas and containers: Keep in an area equipped with solvent resistant flooring. Store in cool place. Keep container tightly closed in a dry and well ventilated place.

Advice on protection against

Fire and explosion: Combustible liquid. Possible formation of ignitable mixtures in Air if heated above flash point and/or if sprayed (atomized). Handle only at temperatures at least 15˚C below the flash point. Keep away from sources of ignition- No smoking. Take measures to prevent the buildup of electrostatic charge.

**8 Exposure controls/personal protection**

* 1. **Control parameters**

|  |
| --- |
| Component: C9-C15 Aliphatics  |
|  Occupational Exposure Limit Values  |
| TRGS 900, AGW: 600 mg/m3, (2(11))Hydrocarbon mixtures, application as solvent (hydrocarbon solvent), additive-free |

**8.2 Exposure controls**

 **Appropriate engineering controls**

 Refer to protective measures listed in sections 7 and 8

 **Personal protective equipment**

 Respiratory protection

Advice: Required, if exposure limit is exceeded (e.g. OEL). In case of intensive or longer exposure use self-contained breathing apparatus. Recommended Filter type: combination filters: A-P2.

 Hand protection

Advice: Solvent-resistant gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact.) Protective gloves should be replaced at, first signs of wear. The following materials are suitable:

 Material: Nitrile rubber

 Break through time: >=480 min

 Glove thickness: 0.45mm

 Eye protection

 Advice: Tightly fighting safety goggles

 Skin and body protection

 Advice: Protective work clothing

 **Environmental exposure controls**

General advice: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform respective authorities responsible for such cases.

**9 Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

 **Form:** liquid

 **Color:**  colorless

 **Odor:** characteristics

 **Odor threshold:** no data available

 **pH:**  no data available

 **Freezing point:**  no data available

 **Boiling point/range:** >180˚ C

 No data available

 **Flash point:**  61˚-65˚C

 **Evaporation Rate:** No data available

 **Flammability**

 **(solid, gas):** No data available

 **Upper explosion limit:** 7% (V)

 **Lower explosion limit:** 0.6% (V)

 **Vapor pressure:** 0.5 hPa (20˚C)

 **Relative vapor**

 **Density:**  not data available

 **Density:** 0.797g/cm3 (20˚C)

 **Water solubility:**  not respectively poorly mixable

**Partition coefficient**

 **n-octanol/water:** no data available

 **auto-ignition**

**temperature:** no data available

 **Thermal**

**Decomposition:** no data available

**Viscosity, dynamic:** No data available

**Explosively:** Formation of explosive air/vapor mixture is possible.

**Oxidizing properties:** None known

**9.2 Other information**

 No further information available.

**10 Stability and Reactivity**

**10.1 Reactivity**

Advice: No decomposition if stored and applied as directed.

**10.2 Chemical Stability**

 Advice: Stable under recommended storage conditions

**10.3 Possibility of hazardous reactions**

Hazardous reactions: Formation of explosive/vapor mixtures is possible.

**10.4 Conditions to avoid**

 Conditions to avoid: Heat, flames and sparks.

 Keep away from direct sunlight

**10.5 Incompatible materials**

 Materials to avoid: Strong oxidizing agents

**10.6 Hazardous decomposition products**

 Hazardous decomposition

Products: Fire may cause evolution of: Carbon oxides. Under certain fire conditions, traces of other toxic products cannot be excluded.

**11 Toxicological information**

**11.1 Information on toxicological effect**

|  |
| --- |
| Acute Toxicity |
| Oral  |
| For this mixture there is no data available. Please find this information in the listing of the component/components below in the MSDS. |
| Inhalation  |
| For this mixture there is no data available. Please find this information in the listing of the component/components below in the MSDS.  |
| Dermal  |
| For this mixture there is no data available. Please find this information in the listing of the component/components below in the MSDS. |
| Irritation  |
| Skin  |
| Results: Repeated exposure may cause skin dryness and cracking  |
| Eyes  |
| Results: Based on available data, the classification criteria are not met.  |
| Sensation  |
| Results: Based on available data, the classification criteria are not met. |
| CMR effects |
| CMR properties  |
| Carcinogenicity: For this product currently there is no data available. Based on available data, the classification criteria are not met. Mutagenicity: For this product currently there is no data available. Based on available data, the classification criteria are not met.Reproductive Toxicity: For this product currently there is no data available. Based on available data, the classification criteria are not met. |
| Specific Target Organ Toxicity |
| Single exposure  |
| Remark: the substance or mixture is not classified as specific target organ toxicant, single exposure. |

|  |
| --- |
| Repeated exposure  |
| Remark: the substance or mixture is not classified as specific target organ toxicant, single exposure. |
| Other toxic properties  |
| Repeated dose toxicity  |
| No data available |
| Aspiration Hazard  |
| May be fatal if swallowed and enters airways  |
| **Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics** |
| **Acute Toxicity** |
| **Oral**  |
| LD50 >5000mg/kg (rat, male and female)(OECD-Test Guidline 401) Aspiration may cause pulmonary edema and pneumonitis.  |
| **Inhalation** |
| LC50 >5 mg/l (rat, male and female)(OECD-Test Guidline 403) Inhalation may cause central nervous system effects.  |
| **Dermal** |
| LD50 >5000 mg/kg (rabbit) (OECD Test Guideline 402)  |
| **Component: Hydrocarbons, C10-C13, isoalkanes, cyclics, >2% aromatics** |
| **Acute toxicity** |
| **Oral** |
| LD50 >5000mg/kg (rat)  Data based on test results or data from a comparable product. |
| Inhalation |
| LC50 >4,951 mg/l (rat, vapor) (OECD Test Guideline 403) Data based on test results or data from a comparable product. |
| Dermal |
| LD50 >5000 mg/kg (rabbit) (OECD Test Guideline 402) Data based on test results or data from a comparable product. |

**12 Ecological Information**

**12.1 Toxicity**

|  |
| --- |
| **Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics** |
| **Acute toxicity** |
| **Fish** |
| LL50 1000 mg/l (Oncorhynchus aquabonita; 96h)  (OECD Test Guideline 203)  |
| **Toxicity to daphnia and other aquatic invertebrates.** |
| EL50 1000 mg/l (Daphina magna; 48 h) (OECD Test Guideline 202)  (Toxicity to daphnia)  |
| **Algae** |
| EL50 1000mg/l (Pseudokirchneriella subcapitata (green algae); 72h) (Toxicity to algae: OECD Test Guidelines 201) |
| **Component: Hydrocarbons, C-10-C13, isoalkanes, cyclics, <2% aromatics** |
| **Acute toxicity** |
| **Fish** |
| LLO >1000 mg/1 (Oncorynchus mykiss (rainbow trout); 96h) (Toxicity to fish) |
| **Toxicity to daphnia and other aquatic invertebrates.** |
| ELO >1000 mg/l (Daphnia magna (water flea; 48 h) (Toxicity to daphnia)  |
| **Algae** |
| EL50 >1000mh/l ( pseudokirchneriella subcapitata (green algae); 72 h)(toxicity to algae) |
|  |

**12.2 Persistence and degradability**

|  |
| --- |
| Persistence and degradability |
| **Persistence** |
| Result: no data available  |
| **Biodegradability** |
| Result: readily biodegradable.  |
| Component: Hydrocarbons, C-10-C13, n-alkanes, isoalkanes, cyclics, <2 aromatics |
| Persistence and degradability |
| Result: Transformation due to photolysis not expected to be significant.  |
| Biodegradability |
| Result: 80% (Exposure time 28d) Readily biodegradable  |

**12.3 Bio accumulative potential**

|  |
| --- |
| **Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% somatic**  |
| **Bioaccumulation** |
| Result: no data available  |
| Component: Hydrocarbons, C10-C13, isoalkane, cyclics, <2% aromatics  |
| Bioaccumulation |
| Result: no data available |

**12.4 Mobility in soil**

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| --- |
| **Component: Hydrocarbons, C-10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics** |
| **Mobility** |
| Result: Highly volatile, will partition rapidly to air, not expected to partition to sediment and wastewater solids.  |
| Component: Hydrocarbons, C10-C13, isoalkane, cyclics, <2% aromatics |
| Mobility |
| Result: no data available |

**12.5 Results of PBT and vPvB assessment**

|  |
| --- |
| **Component: Hydrocarbons, C-10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics** |
| **Results of PBT and vPvB assessment** |
| Result: This substance is not considered to be persistent, bio accumulating nor toxic  (PBT). This substance is not considered to be very persistent nor very bio accumulating (vPvB.) |
| Component: Hydrocarbons, C10-C13, isoalkane, cyclics, <2% aromatics |
| Result: This substance is not considered to be persistent, bio accumulating nor toxic  (PBT). This substance is not considered to be very persistent nor very bio accumulating (vPvB.) |

**12.6 Other adverse effects**

|  |
| --- |
| **Additional ecological information** |
| Result: Do not flush into surface water on sanitary sewer system.  Do not allow material to contaminate ground water system.  |

**13 Disposal considerations**

**13.1 Waste treatment methods**

Product: Disposal together with normal waste is not allowed. Do not let product enter drains. Can be incinerated, when in compliance with local regulations.

Contaminated

Packaging: Empty remaining contents. Do not burn or use a cutting torch on, the

 Empty drum. Risk of explosion. Empty containers should be delivered

 To local recyclers for disposal or to the provider for their reutilization

 In case of being subject to a return and deposit system.

European Waste

Catalogue Number: No waste code according to the European Waste Catalogue. Can be

 assigned for this product, as the intended use dictates the assignment.

 The waste code is established in consultation with the regional waste disposer.

**14 Transport information**

Not dangerous goods for ADR, RID and IMDG.

**14.1 UN number**

 Not applicable.

**14.2 UN proper shipping name**

 Not applicable.

**14.3 Transport hazard class(es)**

 Not applicable.

**14.4 Packaging group**

 Not applicable.

**14.5 Environmental hazards**

 Not applicable.

**14.6 Special precautions for user**

 Not applicable.

**14.7 Transport in bulk according to Annex II or MARPOL 73/78 and the IBC code**

 IMDG: Not applicable.

**15 Regulatory information**

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

WKG (DE): WGK:1; slightly water endangering; WGK (DE);

Major Accident Hazard

Legislation: Falls under the German StörfallV.13

Other regulations: Occupational restriction: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the Protection of young people at work.

**15.2 Chemical Safety Assessment**

Currently we do not have any information from our supplier about this.

**16 Other Information**

Full text of R-phrases referred to under section 2 and 3

R65 Harmful may cause lung damage if swallowed

R66 Repeated exposure may cause skin dryness or cracking

Full text of H-statements refereed to under sections 2 and 3

H304 May be fatal if swallowed and enters airways

H314 Harmful to aquatic life with long lasting effects.

**Further information**

Key literature references: Supplier information and data from the “Database of registered substances” of the European Chemical Agency (ECHA) were used to create this safety data sheet.

Other information: The information provided in this Safety Data Sheet is correct to our knowledge at the date of revision (24.06.2014). The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.