## Multi Tech Nano 400ml

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1. Product identifier

**Trade name/designation:**

Multi Tech Nano 400ml

**Article No.:**
T281000

**UFI:**
4AUN-DH2V-5C00-G9M8

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

**Use of the substance/mixture:**
Lubricating agent

### 1.3. Details of the supplier of the safety data sheet

**Supplier:**


**KANDO Service GmbH**
Hartleitnerstraße 3
4653 Eberstalzell
Austria
**Telephone:** +43 (0) 7241 213 79
**E-mail:** msds@kando.eu


### 1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|---|---|---|
| aerosol dispensers and lighters *(Aerosol 1)* | H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated. | |
| Aspiration hazard *(Asp. Tox. 1)* | H304: May be fatal if swallowed and enters airways. | |
| Respiratory or skin sensitisation *(Skin Sens. 1B)* | H317: May cause an allergic skin reaction. | |

**Additional information:**
This mixture does not present an environmental risk. Under normal conditions of use, no environmentally harmful effect is known or foreseeable.

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms:**



**GHS02**
Flame



**GHS07**
Exclamation mark

**Signal word:** Danger

**Hazard components for labelling:**
Polysulfides, di-tert-dodecyl

| Hazard statements for physical hazards | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |

| Hazard statements for health hazards | |
|---|---|
| H317 | May cause an allergic skin reaction. |

| Supplemental hazard information | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

| Precautionary statements Prevention | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P260 | Do not breathe spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves. |

| Precautionary statements Response | |
|---|---|
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P331 | Do NOT induce vomiting. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

| Precautionary statements Storage | |
|---|---|
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |

## 2.3. Other hazards

**Other adverse effects:**
The mixture does not contain any substance of very high concern (SVHC) >= 0.1 % published by the European Chemical Agency (ECHA) according to Article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table. The mixture does not meet the criteria applied to PBT and vPvB mixtures, according to Annex XIII of REACH Directive (EC) No 1907/2006. The mixture does not contain any substance >=0.1% that is classified as a substance of very high concern (SVHC) according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or the Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

## SECTION 3: Composition/information on ingredients

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### 3.2. Mixtures

**Hazardous ingredients / Hazardous impurities / Stabilisers:**

| Product identifiers | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP] | Concentration |
|---|---|---|
| CAS No.: 64742-48-9<br>EC No.: 918-481-9<br>REACH No.:<br>01-2119463258-33 | **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>Asp. Tox. 1 (H304)<br>Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) > 8,000 mg/kg<br>ATE (dermal) > 3,160 mg/kg<br>ATE (inhalation, dust/mist) > 4,951 mg/L | 25 – < 50<br>Vol-% |
| CAS No.: 124-38-9<br>EC No.: 204-696-9 | **carbon dioxide**<br>Press. Gas (Ref. Liq.) (H281)<br>Warning<br>**Acute Toxicity Estimate**<br>ATE (oral) ≥ 5,000 mg/kg<br>ATE (dermal) ≥ 5,000 mg/kg<br>ATE (inhalation, vapour) 259,354 mg/L<br>ATE (inhalation, dust/mist) ≥ 50 mg/L | 2.5 – < 10<br>Vol-% |
| CAS No.: 68425-15-0<br>EC No.: 270-335-7<br>REACH No.:<br>01-2119540516-41 | **Polysulfides, di-tert-dodecyl**<br>Skin Sens. 1B (H317)<br>Warning<br>**Acute Toxicity Estimate**<br>ATE (oral) > 2,000 mg/kg<br>ATE (dermal) > 2,000 mg/kg<br>ATE (inhalation, vapour) > 20 mg/L | 1 – < 2.5<br>Vol-% |

*Full text of H- and EUH-phrases: see section 16.*

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information:**
When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

**Following inhalation:**
Remove casualty to fresh air and keep warm and at rest.
Consult a doctor if symptoms persist.
Do not allow anything to be taken by mouth.

**In case of skin contact:**
Remove contaminated, saturated clothing immediately.
After contact with skin, wash immediately with plenty of water and soap.
In case of skin reactions, consult a physician.
DO NOT use solvents or thinners.

**After eye contact:**
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Consult a doctor if symptoms persist.

**Following ingestion:**
Do not allow anything to be taken by mouth.
If small amounts are ingested (not more than one sip), rinse mouth with water and consult a doctor.
Do NOT induce vomiting. Keep at rest.
Consult a doctor and show him the label.

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

See section 11.

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media
**Suitable extinguishing media:**
Water mist, Water with additive AFFF (Aqueous Film Forming Foam), Foam, ABC-powder, BC-powder, Carbon dioxide
**Unsuitable extinguishing media:**
Water jet

### 5.2. Special hazards arising from the substance or mixture
In case of fire, dense black smoke is often produced. Exposure to decomposition products can be harmful to health. Do not inhale smoke.
**Hazardous combustion products:**
Carbon monoxide, carbon dioxide, Varied hydrocarbons, aldehydes, Sulphur oxides

### 5.3. Advice for firefighters
Due to the toxicity of the gases produced during thermal decomposition, use self-contained breathing apparatus (insulating equipment). Collect contaminated extinguishing water separately. Do not empty it into the pipes. Cool tanks and parts exposed to heat flow that are not on fire with water. Remove all sources of ignition.

### 5.4. Additional information
Flammable.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Cool endangered containers in the vicinity of the flame with water spray to prevent the containers from bursting under pressure.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures
### 6.1.1. For non-emergency personnel
**Personal precautions:**
Follow protective measures in sections 7 and 8. Remove all sources of ignition. Ventilate affected area. Avoid breathing vapours. Avoid contact with eyes and skin. Wear protective equipment. Keep unprotected persons away.

### 6.1.2. For emergency responders
**Personal protection equipment:**
Wear personal protection equipment (refer to section 8).

### 6.2. Environmental precautions
Stop and collect leaks or spills with liquid-binding, non-combustible material, e.g.: Sand, earth, universal binder, diatomaceous earth in drums for disposal of waste. Prevent entry into drains or watercourses. If the product pollutes watercourses, rivers or sewage systems, inform the competent authorities in accordance with the prescribed procedure. Set up canisters for disposal of waste generated in accordance with applicable regulations (see section 13).

### 6.3. Methods and material for containment and cleaning up
**For cleaning up:**
Preferably clean with a detergent, do not use organic solvents.

### 6.4. Reference to other sections
See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Protective measures

**Advices on safe handling:**

Precautions for safe handling:
The regulations for storage facilities apply to the premises where the mixture is worked with. Persons with a history of skin sensitisation must not use this mixture under any circumstances.
Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse. Ensure good ventilation/extraction at the workplace. Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray.

Advices on safe handling:
For personal protection, see section 8. Observe label information and occupational health and safety regulations. Do not inhale aerosol. Avoid inhalation of vapours. Carry out any industrial work with possible formation of vapours/mist etc. in closed apparatus. Provide vapour extraction at the source of emission and general room ventilation. In addition, provide suitable respiratory protective equipment for short-term work and emergency interventions. Always collect emissions at source. Do not allow mixture to come into contact with skin and eyes. Store opened packaging carefully closed and upright.

Improper equipment and method of operation:
Smoking, eating and drinking are prohibited in the premises where the mixture is used. Never open packages with pressure.

**Fire prevent measures:**

Handle in well ventilated areas. Vapours are heavier than air. They can spread on the ground and form explosive mixtures together with air. Prevent the formation of ignitable or explosive vapour-air concentrations. Avoid vapour concentrations above Avoid exposure limits. Do not spray on a flame or glowing object. Do not open by force or burn, even after use. Use the mixture in rooms without open flames or other ignition sources and with protected electrical equipment. Keep container tightly closed when not in use. Keep away from heat sources, sparks or open flames. Do not use tools that can produce sparks. Do not smoke. Prevent access for unauthorised persons.

#### Advices on general occupational hygiene

Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

**Requirements for storage rooms and vessels:**

Keep only in the original container in a cool, well-ventilated place.

**Hints on storage assembly:**

Keep away from sources of ignition - No smoking.

**Further information on storage conditions:**

Keep only in the original container in a cool, well-ventilated place. Store away from heat, weather, moisture and frost. Container is under pressure. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Do not open by force or burn even after use.

### 7.3. Specific end use(s)

**Recommendation:**

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

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### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

| Limit value type (country of origin) | Substance name | ① Long-term occupational exposure limit value<br>② Short-term occupational exposure limit value<br>③ Instantaneous value<br>④ Monitoring and observation processes<br>⑤ Remark |
|---|---|---|
| MAK (AT) | **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | ① 200 mL/m³<br>② 400 mL/m³<br>⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/ Isohexanen von weniger als 25 %) |
| MAK (AT) | **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | ① 170 mL/m³<br>② 340 mL/m³<br>⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/ Isohexanen von 25 % oder mehr) |
| MAK (AT) | **carbon dioxide**<br>CAS No.: 124-38-9<br>EC No.: 204-696-9 | ① 5,000 ppm (9,000 mg/m³) |
| MAK (AT) | **carbon dioxide**<br>CAS No.: 124-38-9<br>EC No.: 204-696-9 | ② 10,000 ppm (18,000 mg/m³)<br>⑤ (max. 3x60 min./Schicht, Momentanwert) |
| IOELV (EU) | **carbon dioxide**<br>CAS No.: 124-38-9<br>EC No.: 204-696-9 | ① 5,000 ppm (9,000 mg/m³) |

#### 8.1.2. Biological limit values

No data available

#### 8.1.3. DNEL-/PNEC-values

| Substance name | DNEL value | ① DNEL type<br>② Exposure route |
|---|---|---|
| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | 871 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | 185 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | 208 mg/kg bw/ day | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | 125 mg/kg bw/ day | ① DNEL Consumer<br>② Long-term - dermal, systemic effects |
| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | 125 mg/kg bw/ day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |

| Substance name | DNEL value | ① DNEL type<br>② Exposure route |
|---|---|---|
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 32.9 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 5.8 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 46.7 mg/kg bw/day | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 1.7 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 16.7 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |

| Substance name | PNEC Value | ① PNEC type |
|---|---|---|
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 0.001 mg/L | ① PNEC sewage treatment plant |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 3.85 mg/kg | ① PNEC sediment, freshwater |
| **Polysulfides, di-tert-dodecyl**<br>CAS No.: 68425-15-0<br>EC No.: 270-335-7 | 0.385 mg/kg | ① PNEC sediment, marine water |

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Use clean and properly maintained personal protective equipment. Keep personal protective equipment in a clean place, away from the work area. Do not eat, drink or smoke during use. Remove and wash contaminated clothing before reuse. Provide adequate ventilation, especially in enclosed spaces.

#### 8.2.2. Personal protection equipment

**Eye/face protection:**

Avoid contact with eyes. Use eye protection against liquid splashes. Safety goggles complying with standard EN 166 must be worn at all times during use.

**Skin protection:**

Hand protection:
Use suitable chemical-resistant protective gloves according to standard EN ISO 374-1. Gloves must be chosen according to the use and duration of use in the workplace. Protective gloves must be chosen according to the workplace: other chemicals could be changed, physical protection required (cutting, pricking, thermal protection), dexterity required.
Glove material:
PVC (polyvinyl chloride)
NBR (Nitrile rubber)

Skin protection:
In case of heavy splashing, wear liquid-tight chemical protective clothing (type 3) according to EN 14605/A1 to avoid any skin contact. If there is a risk of splashing, wear chemical protective clothing (type 6) according to EN 13034/A1 to avoid any skin contact. Personnel must wear regularly washed work clothes. After contact with the product, all soiled parts of the body must be washed.

**Respiratory protection:**

Gas and steam filter (combi-filter) according to standard EN 14387:
- A1 (brown)
- A2 (brown)
- A3 (brown)

**Other protection measures:**
Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Ensure good ventilation/extraction at the workplace.

### 8.2.3. Environmental exposure controls
No data available

### 8.3. Additional information
No further relevant information available.

## SECTION 9: Physical and chemical properties

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### 9.1. Information on basic physical and chemical properties

**Appearance**

**Form:** Aerosol
**Colour:** colourless
**Odour:** not determined
**flammability:** No data available
**Odour threshold:** not determined

**Safety relevant basis data**

| Parameter | Value | ① Method<br>② Remark |
|---|---|---|
| Initial boiling point and boiling range | *No data available* | |
| Evaporation rate | *No data available* | |
| Vapour pressure | *No data available* | |
| Relative density | 0.85 – 0.87 | |
| Water solubility | practically insoluble | |

### 9.2. Other information
No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity
No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions
At high temperatures, the mixture may release hazardous decomposition products, such as carbon monoxide, carbon dioxide, smoke or nitrogen oxide.

### 10.4. Conditions to avoid
The operation of devices/work equipment that produce flames or sparks or heat a metal surface (e.g. burners, electric arches, ovens, etc.) is not permitted in the work area/rooms. Avoid: Heating, heat, electrical charge, flames and hot surfaces, frost, ignition sources.

### 10.5. Incompatible materials
Acids, Oxidizing agent

### 10.6. Hazardous decomposition products
Carbon monoxide, Carbon dioxide, Varied hydrocarbons, aldehydes, Sulphur oxides

## SECTION 11: Toxicological information

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

| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9<br>EC No.: 918-481-9 |
|---|
| **$LD_{50}$ oral:** >8,000 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >3,160 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** >4,951 mg/L |

| **carbon dioxide** CAS No.: 124-38-9 EC No.: 204-696-9 |
|---|
| **ATE (inhalation, vapour):** 259,354 mg/L |
| **$LD_{50}$ oral:** ≥5,000 mg/kg (Ratte) |
| **$LD_{50}$ dermal:** ≥5,000 mg/kg (Kaninchen) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** ≥50 mg/L 4 h (Ratte) |
| **Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7 |
| **$LD_{50}$ oral:** >2,000 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >2,000 mg/kg (Rat) OECD 402 |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** >20 mg/L (Rat) |

**Acute oral toxicity:**
Based on available data, the classification criteria are not met.

**Acute dermal toxicity:**
Based on available data, the classification criteria are not met.

**Acute inhalation toxicity:**
Based on available data, the classification criteria are not met.

**Skin corrosion/irritation:**
May cause an allergic skin reaction.

**Serious eye damage/irritation:**
Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation:**
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity:**
Based on available data, the classification criteria are not met.

**Carcinogenicity:**
Based on available data, the classification criteria are not met.

**Reproductive toxicity:**
Based on available data, the classification criteria are not met.

**STOT-single exposure:**
Based on available data, the classification criteria are not met.

**STOT-repeated exposure:**
Based on available data, the classification criteria are not met.

**Aspiration hazard:**
May be fatal if swallowed and enters airways.
Aspiration toxicity leads to serious acute effects, such as chemical-induced pneumonia, lung damage of varying severity, or even death by aspiration.

### 11.2. Information on other hazards

**Endocrine disrupting properties:**
None of the ingredients are included.

## SECTION 12: Ecological information

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### 12.1. Toxicity

| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9 EC No.: 918-481-9 |
|---|
| **$LC_{50}$:** >1,000 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) |
| **$LC_{50}$:** >1,000 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) |
| **$EC_{50}$:** >1,000 mg/L 2 d (crustaceans, Daphnia magna) |
| **$ErC_{50}$:** >1,000 mg/L 4 d (Algae/water plant, Scenedesmus subspicatus) |

| **Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7 |
|---|
| **$LC_{50}$:** >100 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203 |
| **$EC_{50}$:** >100 mg/L 2 d (crustaceans, Daphnia magna) |
| **NOEC:** >0.1 mg/L 2 d (crustaceans, Daphnia magna) |
| **NOEC:** >0.08 mg/L 3 d (Algae/water plant, Raphidocelis subcapitata) |
| **$ErC_{50}$:** >100 mg/L 3 d (Algae/water plant, Selenastrum capricornutum) |
| **$LC_{50}$:** >100 mg/L 4 d (fish, Danio rerio (zebrafish)) OECD 203 |

**Aquatic toxicity:**
No further relevant information available.

### 12.2. Persistence and degradability

| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9 EC No.: 918-481-9 |
|---|
| **Biodegradation:** Yes, rapidly |
| **Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7 |
| **Biodegradation:** Yes, slowly |

**Abiotic degradation:**
No further relevant information available.

**Biodegradation:**
No further relevant information available.

### 12.3. Bioaccumulative potential

| **Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7 |
|---|
| **Log $K_{OW}$:** > 12 |
| **Bioconcentration factor (BCF):** < 1 |

**Accumulation / Evaluation:**
No further relevant information available.

### 12.4. Mobility in soil
No further relevant information available.

### 12.5. Results of PBT and vPvB assessment

| **Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9 EC No.: 918-481-9 |
|---|
| **Results of PBT and vPvB assessment:** — |
| **carbon dioxide** CAS No.: 124-38-9 EC No.: 204-696-9 |
| **Results of PBT and vPvB assessment:** — |
| **Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7 |
| **Results of PBT and vPvB assessment:** — |

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties
None of the ingredients are included.

### 12.7. Other adverse effects
Harmful to aquatic life with long lasting effects.
Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods
Dispose of waste according to applicable legislation.

### Waste treatment options

**Appropriate disposal / Product:**

Waste disposal must be carried out without risk to people and the environment, in particular to water, air, soil, fauna and flora. Disposal or recycling in accordance with valid legislation preferably by an authorised waste collector or a specialist waste management company. Do not contaminate soil or groundwater, do not dispose of waste in the environment.

**Appropriate disposal / Package:**

Uncleaned packaging: Only dispose of the container when it is empty. Do not remove the label(s) on the container. Return to an authorised disposal company.

## SECTION 14: Transport information

| Land transport (ADR/RID) | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|---|---|---|
| **14.1. UN number or ID number** | | | |
| UN 1950 | UN 1950 | UN 1950 | UN 1950 |
| **14.2. UN proper shipping name** | | | |
| AEROSOLS, FLAMMABLE | AEROSOLS, FLAMMABLE | AEROSOLS, flammable | AEROSOLS, flammable |
| * **14.3. Transport hazard class(es)** | | | |
|  2.1 |  2.1 |  2.1 |  2.1 |
| **14.4. Packing group** | | | |
| | | - | |
| **14.5. Environmental hazards** | | | |
| No | No | No | No |
| **14.6. Special precautions for user** | | | |
| **Special Provisions:** 190 \| 327 \| 344 \| 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F **Tunnel restriction code:** (D) | **Special Provisions:** 190 \| 327 \| 344 \| 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F | **Special Provisions:** 63 \| 190 \| 277 \| 327 \| 344 \| 381 \| 959 **Limited quantity (LQ):** Siehe SV277 **Excepted Quantities (EQ):** E0 **EmS-No.:** F-D, S-U **Remark:** Stowage Handling: - SW1 SW22 | **Special Provisions:** A145 \| A167 \| A802 **Limited quantity (LQ):** Y203 **Excepted Quantities (EQ):** E0 **Remark:** IATA Packing Instructions - Passenger: forbidden IATA Maximum Quantity - Passenger: forbidden IATA-Verpackungsanweisung - Cargo: 203 IATA Maximum Quantity - Cargo: 150 KG |

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU legislation

**Authorisations:**

The following directives have been taken into account:
- Regulation (EC) No 1272/2008 as amended as Regulation (EU) No 2021/643 (ATP 16).
- Regulation (EC) No 1272/2008 as amended as Regulation (EU) No 2021/849 (ATP 17)

### 15.1.2. National regulations
No data available

### 15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

## SECTION 16: Other information

* **16.1. Indication of changes**

| | |
|---|---|
| 3.2. | Mixtures |
| 8.1. | Control parameters |
| 9.1. | Information on basic physical and chemical properties |
| 11.1. | Information on hazard classes as defined in Regulation (EC) No 1272/2008 |
| 12.1. | Toxicity |
| 14.3. | Transport hazard class(es) |
| 16.1. | Indication of changes |
| 16.2. | Abbreviations and acronyms |

* **16.2. Abbreviations and acronyms**

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| DNEL | derived no-effect level |
| $EC_{50}$ | Effective Concentration 50% |
| ECHA | European Chemicals Agency |
| EN | European Standard |
| ES | Exposure scenario |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| KG | body weight |
| $LC_{50}$ | Lethal (fatal) Concentration 50% |
| $LD_{50}$ | Lethal (fatal) Dose 50% |
| MAK | Maximum concentration in the workplace air (CH) |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety & Health |
| NOEC | No Observed Effect Concentration |
| OECD | Organisation for Economic Cooperation and Development |
| OEL | Threshold Limit Value |
| OSHA | Occupational Safety & Health Administration |
| PBT | persistent and bioaccumulative and toxic |
| PNEC | Predicted No Effect Concentration |
| REACH | Registration, Evaluation and Authorization of Chemicals |
| RID | Dangerous goods regulations for transport by rail |
| SVHC | substances of very high concern |
| TRGS | Technische Regeln für Gefahrstoffe |
| UN | United Nations |
| ZNS | central nervous system |

### 16.3. Key literature references and sources for data
No data available

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|---|---|---|
| aerosol dispensers and lighters *(Aerosol 1)* | H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated. | |
| Aspiration hazard *(Asp. Tox. 1)* | H304: May be fatal if swallowed and enters airways. | |
| Respiratory or skin sensitisation *(Skin Sens. 1B)* | H317: May cause an allergic skin reaction. | |

### 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

| Hazard statements | |
|---|---|
| H281 | Contains refrigerated gas; may cause cryogenic burns or injury. |
| H304 | May be fatal if swallowed and enters airways. |
| H317 | May cause an allergic skin reaction. |

### 16.6. Training advice
No data available

### 16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.