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

### 1.1 Product identifier

**Power Shield Aerosol**

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

#### 1.2.1 Relevant uses

Corrosion protection

#### 1.2.2 Uses advised against

None known.

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

**Company**

Rovers North Inc.
1319 Vermont, Rt 128
05494 Westford VT / USA
Phone +1 800 403 7591
Homepage www.roversnorth.com
E-mail email@roversnorth.com

**Manufacturer**

Waxoyl AG
Mühlemattstrasse 24
4104 Oberwil / SWITZERLAND
Phone +41 61 281 77 94
Homepage www.waxoyl.com
E-mail info@waxoyl.ch

**Address enquiries to**

**Technical information** email@roversnorth.com

**Safety Data Sheet** sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

### 1.4 Emergency telephone number

**Advisory body** +49 (0)89-19240 (24h) (English)

**Company** +41-61-28177 94 Mo-Fr 8:00 - 16:00

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2024)

**Hazard pictograms**



**Signal word** DANGER

**Contains:**
Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8

Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0

Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0

**Hazard statements**
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.

**Precautionary statements**
P210 Keep away from flames and hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### 2.3 Other hazards

**Physico-chemical hazards** Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

**Human health dangers** Contains no ingredients with endocrine-disrupting properties.

**Environmental hazards** Does not contain any PBT or vPvB substances.

**Other hazards** Because of the high vapor pressure, containers are liable to burst iftemperature rises.

This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

**Not applicable**

### 3.2 Mixtures

**The product is a mixture.**

| Range [%] | Substance |
|---|---|
| 25 - 30 | Butane |
| | CAS: 106-97-8 |
| 10 - 15 | Distillates (petroleum), hydrotreated light paraffinic |
| | CAS: 64742-55-8 |
| 10 - 15 | Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| 5 - 10 | isobutane |
| | CAS: 75-28-5 |
| 5 - 10 | Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics |
| | CAS: 64742-49-0 |
| 2,5 - 5 | Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt) |
| | CAS: 64742-65-0 |
| 2,5 - 5 | Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract) |
| | CAS: 64742-54-7 |
| 2,5 - 5 | Propane |
| | CAS: 74-98-6 |
| 1 - 2,5 | Sulfonic acids, petroleum, calcium salts |
| | CAS: 61789-86-4 |
| 0,1 - 1 | n-Hexane |
| | CAS: 110-54-3 |

**Comment on component parts**
For full text of H-statements: see SECTION 16.
Mineral oil containing mixture. Mineral oil with < 3% DMSO extract, as measured by IP 346.
< 0,1 % butadiene (CAS 106-99-0, EC 203-450-8)

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information**
Take off contaminated clothing and wash before reuse.

**Inhalation**
Remove person to fresh air and keep comfortable for breathing.
In the event of symptoms seek medical treatment.

**Skin contact**
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

**Eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

**Ingestion**
Rinse mouth.
Do not induce vomiting.
Consult a doctor immediately.

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

Irritant effects
Allergic reactions
Stomachache.
Nausea, vomiting.
Diarrhoea

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

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Foam.
Dry powder.
Water spray jet.
Carbon dioxide.

**Extinguishing media that must not be used**
Full water jet.

### 5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Bursting aerosols can be forcibly projected from a fire.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

## SECTION 6: Accidental release measures

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

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.
Dispose of absorbed material in accordance within the regulations.
Take up residues with absorbent material (e.g. sand).

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.
Provide suitable vacuuming at the processing machines and in the processing area.
Avoid spilling or spraying in enclosed areas.
Avoid breathing mist/vapours/spray.

Keep away from all sources of ignition - Refrain from smoking.
Vapors can form an explosive mixture with air.
Use only non-sparking tools.

Do not eat, drink, smoke or snuff while working.
Take off contaminated clothing and wash before reuse.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.

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

Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.

Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Protect from heat/overheating.
Protect from sun.
Recommended storage temperature: 10 °C - 35 °C.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with occupational exposure limits to be monitored (US)**

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |

| |
|---|
| Long-term exposure: 100 ppm, 525 mg/m³, OSHA |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract) |
| CAS: 64742-54-7 |
| Long-term exposure: 5 mg/m³, OSHA, oil mist |
| Distillates (petroleum), hydrotreated light paraffinic |
| CAS: 64742-55-8 |
| Long-term exposure: 5 mg/m³, Oil mist, mineral |
| n-Hexane |
| CAS: 110-54-3 |
| Long-term exposure: 500 ppm, 1800 mg/m³, NIOSH: 50ppm, 180 mg/m³ |
| isobutane |
| CAS: 75-28-5 |
| Long-term exposure: 1000 ppm, ACGIH 2011 |
| Propane |
| CAS: 74-98-6 |
| Long-term exposure: 1000 ppm, 1800 mg/m³, OSHA |
| Butane |
| CAS: 106-97-8 |
| Long-term exposure: 800 ppm, 1900 mg/m³, NIOSH |

**DNEL**

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| There are no DNEL values established for the substance. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| Industrial, inhalative (vapor), Long-term - systemic effects, 2035 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 773 mg/kg bw |
| general population, dermal, Long-term - systemic effects, 699 mg/kg bw |
| general population, inhalative (vapor), Long-term - systemic effects, 608 mg/m³ |
| general population, oral, Long-term - systemic effects, 699 mg/kg bw |
| isobutane, CAS: 75-28-5 |
| There are no DNEL values established for the substance. |
| Propane, CAS: 74-98-6 |
| There are no DNEL values established for the substance. |
| Butane, CAS: 106-97-8 |
| There are no DNEL values established for the substance. |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m³ |
| Industrial, inhalative, Long-term - local effects, 5.58 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day |
| general population, inhalative, Long-term - local effects, 1.19 mg/m³ |
| general population, oral, Long-term - systemic effects, 740 µg/kg bw/day |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| Industrial, inhalative, Long-term - systemic effects, 2,73 mg/m³ |
| Industrial, inhalative, Long-term - local effects, 5,58 mg/m³ |

| |
|---|
| Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day |
| general population, oral, Long-term - local effects, 740 µg/kg bw/day |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| Industrial, inhalative, Long-term - systemic effects, 11,75 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 3,33 mg/kg bw/d |
| Industrial, dermal, Long-term - local effects, 1,03 mg/cm² |
| general population, inhalative, Long-term - systemic effects, 2,9 mg/m³ |
| general population, dermal, Long-term - systemic effects, 1,667 mg/kg bw/day |
| general population, dermal, Long-term - local effects, 0,513 mg/cm² |
| general population, oral, Long-term - systemic effects, 0,833 mg/kg bw/day |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| Industrial, inhalative, Long-term - systemic effects, 2,73 mg/m³ |
| Industrial, inhalative, Long-term - local effects, 5,58 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 0,97 mg/kg |
| general population, oral, Long-term - systemic effects, 0,74 mg/kg |

**PNEC**

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| There are no PNEC values established for the substance. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| There are no PNEC values established for the substance. |
| isobutane, CAS: 75-28-5 |
| There are no PNEC values established for the substance. |
| Propane, CAS: 74-98-6 |
| There are no PNEC values established for the substance. |
| Butane, CAS: 106-97-8 |
| There are no PNEC values established for the substance. |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| oral (food), 9,33 mg/kg |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| oral (food), 9,33 mg/kg food |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| freshwater, 1 mg/l (AF=1000) |
| seawater, 1 mg/l (AF=10000) |
| sewage treatment plants (STP), 1000 mg/l (AF=10) |
| sediment (freshwater), 226 000 000 mg/kg dw |
| sediment (seawater), 226 000 000 mg/kg dw |
| soil, 271 000 000 mg/kg dw |
| oral (food), 16,667 mg/kg food |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| oral (food), 9,33 mg/kg |

### 8.2 Exposure controls

| | |
|---|---|
| **Additional advice on system design** | Ensure adequate ventilation on workstation. |
| **Eye protection** | Tightly fitting goggles. (EN 166:2001) |
| **Hand protection** | 0,4 mm NBR: acrylonitrile butadiene rubber, >480 min (EN 374-1/-2/-3).<br>0,4 mm Fluoro rubber, >480 min (EN 374-1/-2/-3).<br>0,7 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).<br>The details concerned are recommendations. Please contact the glove supplier for further information. |
| **Skin protection** | Protective clothing (EN 340) |
| **Other** | Avoid contact with eyes and skin.<br>Do not breathe vapor/spray.<br>Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. |
| **Respiratory protection** | In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.<br>Short term: filter apparatus, combination filter A-P2. |
| **Thermal hazards** | No information available. |
| **Delimitation and monitoring of the environmental exposition** | Protect the environment by applying appropriate control measures to prevent or limit emissions. |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | Liquid |
| **Form** | aerosol |
| **Color** | white |
| **Odor** | characteristic |
| **Odor threshold** | Not applicable |
| **pH-value** | Not applicable |
| **pH-value [1%]** | Not applicable |
| **Boiling point or initial boiling point and boiling range [°C]** | No information available. |
| **Flash point [°C]** | No information available. |
| **Flammability** | Extremely flammable aerosol. |
| **Lower explosion limit** | 1,5 - 1,86 Vol.-% (propellant) |
| **Upper explosion limit** | 8,5 - 9,5 Vol.-% (propellant) |
| **Oxidizing properties** | No |
| **Vapor pressure/gas pressure [kPa]** | No information available. |
| **Density [g/cm³]** | 0,784 |
| **Relative density** | Not determined |
| **Bulk density [kg/m³]** | Not applicable |
| **Solubility in water [g/L]** | insoluble |
| **Solubility other solvents** | No information available. |
| **Partition coefficient n-octanol/water (log value)** | Not determined |
| **Kinematic viscosity** | Not determined |
| **Relative vapour density** | Not determined |
| **Melting point [°C]** | Not determined |
| **Auto-ignition temperature [°C]** | Not determined |
| **Decomposition temperature [°C]** | Not applicable |
| **Particle characteristics** | Not applicable |

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No hazardous reactions will occur if handled and stored as directed.
In use, may form flammable/explosive vapor-air mixture.

### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

Heat causes increase in pressure and risk of bursting.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

### 10.4 Conditions to avoid

See SECTION 7.2.

### 10.5 Incompatible materials

Oxidizing agent

### 10.6 Hazardous decomposition products

Toxic pyrolysis products.
Oxide of carbon (COx)

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute oral toxicity**

| Product |
|---|
| Based on the information available, the classification criteria have not been fulfilled. |

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| LD50, oral, Rat, 5000 - 15000 mg/kg bw |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LD50, oral, Rat, > 5000 mg/kg |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| LD50, oral, Rat, > 5000 mg/kg bw |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| LD50, oral, Rat, 5000 mg/kg bw |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| LD50, oral, Rat, >5000 mg/kg bw |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| no adverse effect observed (by analogy with similar substances), (CAS 64742-56-9), |
| LC50, oral, Rat, > 5000 mg/kg, OECD 401 |
| n-Hexane, CAS: 110-54-3 |
| LD50, oral, Rat, 24 - 49 mL/kg bw |

**Acute dermal toxicity**

| Product |
|---|
| Based on the information available, the classification criteria have not been fulfilled. |

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| LD50, dermal, Rat, >2000 mg/kg bw |
| LD50, dermal, Rabbit, 3160 - 5000 mg/kg bw |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LD50, dermal, Rat, > 2800 mg/kg |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| LD50, dermal, Rabbit, > 5000 mg/kg bw |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| LD50, dermal, Rabbit, > 2000 - 5000 mg/kg bw |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| LD50, dermal, Rabbit, > 5000 mg/kg bw<br>>5000 mg/kg bw |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| no adverse effect observed (by analogy with similar substances), (CAS 64742-56-9), |
| LD50, dermal, Rabbit, > 5000 mg/kg, OECD 402 |
| n-Hexane, CAS: 110-54-3 |
| LD50, dermal, Rabbit, 3350 mg/kg |
| LD50, dermal, Rabbit, 5 mL/kg bw |

**Acute inhalational toxicity**

| Product |
|---|
| Based on the information available, the classification criteria have not been fulfilled. |

| Substance |
|---|

| |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| LC50, inhalative, Rat, 5 mg/L air, 8h |
| LC50, inhalative, Rat, 41 - 4467 ppm, 8h |
| LC50, inhalative, Rat, 4,951 - 9,3 mg/L air, 4h |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LC50, inhalative, Rat, > 23,3 mg/l (4h) |
| isobutane, CAS: 75-28-5 |
| LC50, inhalative, Rat, 1442 mg/l (15min) |
| Propane, CAS: 74-98-6 |
| LC50, inhalative, Rat, > 1443 mg/l (15 min) (Lit.) |
| Butane, CAS: 106-97-8 |
| LC50, inhalative, Rat, 1443 mg/L air (15min) |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| LC50, inhalative, Rat, 2,18 - 5,53 mg/L air 4h, 4h |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| LC50, inhalative, Rat, >1.9 mg/L air |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| LC50, inhalativ (mist), Rat, > 5,53 mg/l, OECD 403, 4h |
| n-Hexane, CAS: 110-54-3 |
| LC50, inhalative, Rat, 17,6 mg/L |

**Serious eye damage/irritation** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| Eye, OECD 405, Slight irritant effect - does not require labelling. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| Rabbit, in vivo (Federal Register of the F.D.A. Test for e, non-irritating |
| isobutane, CAS: 75-28-5 |
| Eye, non-irritating |
| Propane, CAS: 74-98-6 |
| Eye, non-irritating |
| Butane, CAS: 106-97-8 |
| Eye, non-irritating |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| Eye, non-irritating |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| Eye, no adverse effect observed |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| Rabbit (eye), OECD 405, non-irritating |
| n-Hexane, CAS: 110-54-3 |
| Eye, Rabbit, OECD 405, non-irritating |

**Skin corrosion/irritation** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| OECD 404, Repeated exposure may cause skin dryness or cracking. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| Rabbit, in vivo, OECD 404, non-irritating |
| isobutane, CAS: 75-28-5 |
| dermal, non-irritating |

| |
|---|
| Propane, CAS: 74-98-6 |
| dermal, non-irritating |
| Butane, CAS: 106-97-8 |
| dermal, non-irritating |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| OECD 404, non-irritating |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| dermal, non-irritating |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| dermal, no adverse effect observed |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| Rabbit, in vivo, non-irritating |
| n-Hexane, CAS: 110-54-3 |
| Harmonised classification: Skin Irrit. 2 H315 |

**Respiratory or skin sensitisation** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| dermal, OECD 406, non-sensitizing |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| Guinea pig, in vivo (non-LLNA), OECD 406, non-sensitizing |
| isobutane, CAS: 75-28-5 |
| dermal, non-sensitizing |
| inhalative, non-sensitizing |
| Propane, CAS: 74-98-6 |
| dermal, non-sensitizing |
| inhalative, non-sensitizing |
| Butane, CAS: 106-97-8 |
| inhalative, non-sensitizing |
| dermal, non-sensitizing |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| dermal, non-sensitizing |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| dermal, sensitising |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| dermal, Guinea pig, OECD 406, non-sensitizing |
| n-Hexane, CAS: 110-54-3 |
| dermal, mouse, OECD 429, no adverse effect observed |

**Specific target organ toxicity — single exposure** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| inhalative, adverse effect observed |
| isobutane, CAS: 75-28-5 |
| inhalative, non-irritating |
| Propane, CAS: 74-98-6 |
| inhalative, non-irritating |
| Butane, CAS: 106-97-8 |
| inhalative, non-irritating |
| n-Hexane, CAS: 110-54-3 |
| Harmonised classification: STOT SE 3 H336 |

**Specific target organ toxicity — repeated exposure** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| NOAEL, dermal, Rabbit, 2000 mg/kg bw/day |
| NOAEL, oral, Rat, 500 mg/kg bw/day |
| NOAEC, inhalative, Rat, 6000 mg/m³ |
| NOAEC, inhalative, mouse, 11600 mg/m³ |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| NOAEC, inhalative, Rat, 8117 mg/m³, OECD 413, no adverse effect observed |
| isobutane, CAS: 75-28-5 |
| NOAEC, inhalative, Rat, 4437 mg/m³, The effects observed are not sufficient for classification. |
| Butane, CAS: 106-97-8 |
| NOAEC, inhalative, Rat, 4437 mg/m³, The effects observed are not sufficient for classification. |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day |
| NOAEL, dermal, Rabbit, 1000 mg/kg bw/day |
| NOAEC, inhalative, Rat, 980 mg/m³ air |
| LOAEL, oral, Rat, 125 mg/kg bw/day |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| NOAEL, inhalative, Rat, 980 mg/m³ air, no adverse effect observed |
| LOAEL, dermal, mouse, 100 mg/kg bw/day, The effects observed are not sufficient for classification. |
| LOAEL, oral, Rat, 125 mg/kg bw/day, The effects observed are not sufficient for classification. |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| NOAEL, oral, Rat, 500 mg/kg bw/day, adverse effect observed |
| NOAEL, dermal, Rat, 1000 mg/kg bw/day, no adverse effect observed |
| NOAEC, inhalative, Rat, 881,58 mg/m³, no adverse effect observed |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| no adverse effect observed (by analogy with similar substances), (CAS 64742-04-7), |
| NOAEL, dermal, Rat, ≥ 2000 mg/kg, OECD 411 |
| NOAEL, inhalative, Rat, > 980 mg/m³, OECD 412 |
| LOAEL, oral, Rat, 125 mg/kg, OECD 408 |
| n-Hexane, CAS: 110-54-3 |
| Harmonised classification: STOT RE 2 H373 |

**Mutagenicity** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| substance with similar structure, OECD 471, 473, 474, 476, 478, 479, negativ |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| NOEL, oral, mouse, > 2000 mg/kg, OECD 474, no adverse effect observed |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| in vitro, negativ |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| in vitro, OECD 471, negativ |
| in vivo, OECD 474, negativ |

**Reproduction toxicity** Based on the information available, the classification criteria have not been fulfilled.

**- Fertility**

| Substance |
|---|
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| NOAEL, inhalativ (vapor ), Rat, 9000 ppm, OECD 416, no adverse effect observed |

| |
|---|
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| NOAEL, oral, Rat, 1000 mg/kg bw/d, no adverse effect observed |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| NOAEL, Rat, (P, F1) : ≥ 1000 mg/kg, OECD 421 |
| n-Hexane, CAS: 110-54-3 |
| Harmonised classification: Repr. 2 H361f |

**- Development**

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| NOAEC, inhalative, Rat, 5220 mg/m³ |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| inhalative, no adverse effect observed |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| NOAEL, Rat, 2000 mg/kg, OECD 414 |
| LOAEL, Rat, 125 mg/kg, OECD 414 |

**Carcinogenicity** Based on the information available, the classification criteria have not been fulfilled.

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| substance with similar structure, OECD 453, negativ |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| no adverse effect observed |

**Aspiration hazard**

May be fatal if swallowed and enters airways.
Based on the information available, the classification criteria have been fulfilled.
Calculation method

**General remarks**

The determination of properties hazardous to health does not take the propellant or carrier material into account.
Toxicological data of complete product are not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| EL0, (72h), Pseudokirchneriella subcapitata, 1 g/L |
| EL0, (48h), Daphnia magna, 1 g/L |
| NOELR, (28d), Fish, 101 µg/L |
| NOELR, (72h), Algae, 1 g/L |
| LL0, (96h), Oncorhynchus mykiss, 1 g/L |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LC50, (96h), Daphnia magna, < 10 mg/l |
| EL50, (72h), Pseudokirchneriella subcapitata, > 10 - 30 mg/l |
| NOEC, (21d), Daphnia magna, 0,17 mg/l |
| NOELR, (72h), Pseudokirchneriella subcapitata, > 10 mg/l |
| LL50, (96h), Oncorhynchus mykiss, > 13,4 mg/l |
| LOEC, (21d), Daphnia magna, 0,32 mg/l |
| isobutane, CAS: 75-28-5 |
| LC50, (96h), Fish, 29,535 mg/L |
| Butane, CAS: 106-97-8 |
| LC50, (96h), Fish, 24,11 - 147,54 mg/L |
| LC50, (48h), Invertebrates, 14,22 - 69,43 mg/L |
| EC50, (96h), Algae, 7,71 - 19,37 mg/L |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| EC50, (48h), > 10000 mg/l (Gammarus pulex), OECD 202 |
| EC50, (72h), Algae, > 100 mg/l |
| NOEC, (72h), Pseudokirchneriella subcapitata, ≥ 100 mg/l, OECD 201 |
| NOEC, (21d), Daphnia magna, 10 mg/l, OECD 211 |
| LL50, (96h), Fish, > 100 mg/l, OECD 203 |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| NOELR, (14d), Fish, 1 g/L |
| LL50, (96h), Invertebrates, 10 g/L |
| LL50, (96h), Fish, 100 mg/L |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| NOEC, (72h), Pseudokirchneriella subcapitata, 1000 mg/l |
| LL50, (96h), Fish, > 10 000 mg/l |
| EC0, (48h), Daphnia magna, >1000 mg/l |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| LC50, (96h), Pimephales promelas, > 100 mg/l, OECD 203 |
| EL50, (48h), Daphnia magna, > 10 000 mg/l, OECD 202 |
| NOELR, (14d), Oncorhynchus mykiss, >= 1000 mg/l |
| NOEL, (72h), Pseudokirchneriella subcapitata, >= 100 mg/l, OECD 201 |
| NOEL, (21d), Daphnia magna, 10 mg/l, OECD 211 |
| NOEL, (72h), Pseudokirchneriella subcapitata, >= 100 mg/l, OECD 201 |
| n-Hexane, CAS: 110-54-3 |
| LC50, (96h), Pimephales promelas, 2,5 mg/l (ECOTOX) |
| EC50, (48h), Daphnia magna, 2,1 mg/l (Lit) |

### 12.2 Persistence and degradability

**Behaviour in environment compartments** Not determined

**Behaviour in sewage plant** Not determined

**Biological degradability** Not determined

| Substance |
|---|
| Naphtha (petroleum), hydrotreated heavy (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) CAS 64742-48-9 / 64742-47-8 |
| (28d), >= 60 %, OECD 301 F |
| isobutane, CAS: 75-28-5 |
| The product is readily biodegradable. |
| Propane, CAS: 74-98-6 |
| The product is readily biodegradable. |
| Butane, CAS: 106-97-8 |
| The product is readily biodegradable. |
| Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7 |
| (28d), 31 %, OECD 301 F, The product is not readily biodegradable. |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| Biological degradability:, (28d), 2 - 31,13 %, QSAR, The product is not readily biodegradable. |
| Sulfonic acids, petroleum, calcium salts, CAS: 61789-86-4 |
| (28d), 8,6 % |
| Distillates (petroleum), hydrotreated light paraffinic, CAS: 64742-55-8 |
| (28d), 2 - 4 %, OECD 301 B |
| (28d), 31,13 %, OECD 301 F |
| The product is not readily biodegradable. |
| n-Hexane, CAS: 110-54-3 |
| (28d), 98 %, OECD 301 F, The product is readily biodegradable. |

### 12.3 Bioaccumulative potential

No information available.

| Substance |
|---|
| isobutane, CAS: 75-28-5 |
| log Kow, 2,88 |
| Propane, CAS: 74-98-6 |
| log Kow, 1,815 |
| Butane, CAS: 106-97-8 |
| log Kow, 2,89 |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| BCF, 0,4 - 71100 L/kg, QSAR |

### 12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

| Substance |
|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0 |
| log Koc, 1,71- 14,70, QSAR |

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

### 12.7 Other adverse effects

None known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

For recycling, consult manufacturer.
Dispose of as hazardous waste.

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.

**RCRA Hazard Class (40CFR 261)**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

## SECTION 14: Transport

### 14.1 UN number

| | |
|---|---|
| **Transport by land according to ADR/RID** | 1950 |
| **Inland navigation (ADN)** | 1950 |
| **Marine transport in accordance with IMDG** | 1950 |
| **Air transport in accordance with IATA** | 1950 |
| **DOT Road Shipment Information (49 CFR)** | 1950 |

## 14.2 UN proper shipping name

| | |
|---|---|
| **Transport by land according to ADR/RID** | Aerosols |
| **- Classification Code** | 5F |
| **- Label** |  |
| **- ADR LQ** | 1 l |
| **- ADR 1.1.3.6 (8.6)** | Transport category (tunnel restriction code) 2 (D) |
| **Inland navigation (ADN)** | Aerosols |
| **- Classification Code** | 5F |
| **- Label** |  |
| **Marine transport in accordance with IMDG** | Aerosols |
| **- EMS** | F-D, S-U |
| **- Label** |  |
| **- IMDG LQ** | 1 l |
| **Air transport in accordance with IATA** | Aerosols, flammable |
| **- Label** |  |
| **DOT Road Shipment Information (49 CFR)** | UN/NA 1950 Aerosols 2 |
| **- Label** |  |

## 14.3 Transport hazard class(es)

| | |
|---|---|
| **Transport by land according to ADR/RID** | 2 |
| **Inland navigation (ADN)** | 2 |
| **Marine transport in accordance with IMDG** | 2.1 |
| **Air transport in accordance with IATA** | 2.1 |
| **DOT Road Shipment Information (49 CFR)** | 2 |

### 14.4 Packing group

| | |
|---|---|
| **Transport by land according to ADR/RID** | Not applicable |
| **Inland navigation (ADN)** | Not applicable |
| **Marine transport in accordance with IMDG** | Not applicable |
| **Air transport in accordance with IATA** | Not applicable |
| **DOT Road Shipment Information (49 CFR)** | Not applicable |

### 14.5 Environmental hazards

| | |
|---|---|
| **Transport by land according to ADR/RID** | No |
| **Inland navigation (ADN)** | No |
| **Marine transport in accordance with IMDG** | No |
| **Air transport in accordance with IATA** | No |
| **DOT Road Shipment Information (49 CFR)** | No |

### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### US Regulations

| | |
|---|---|
| **National regulations** | 29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65 |
| **- SARA, 302** | This product does not contain any ingredients regulated under this list. |
| **- SARA, 311** | This product does not contain any ingredients regulated under this list. |
| **- SARA, 313** | This product contain one ingredient regulated under this list(40 CFR part 372.65):<br>CAS 75-28-5; CAS 74-98-6 |
| **- CA Proposition 65** | No chemical substances in this material are named on the California P65 list. |
| **- New Jersey RTKHSL** | No information available. |
| **- TSCA** | TSCA listing of all ingredients can not be guaranted. |
| **- FDA** | Not applicable |
| **American Conference of Governmental Industrial Hygienists - ACGIH** | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcino-gen by ACGIH. |
| **International Agency for Research on Cancer IARC** | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| **National Toxicology Program - NTP** | Ingredients not listed. |
| **HAP-VOC** | ca. 62 % |
| **Transport-regulations** | DOT-Classification, ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2026) |

### 15.2 Chemical safety assessment

Not applicable

## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route;
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure;
CAS = Chemical Abstracts Service;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
CFR = Code of Federal Regulations;
CPR = Controlled Products Regulations;
DMEL = Derived Minimum Effect Level;
DNEL = Derived No Effect Level;
DOT = Department of Transportation;
EC50 = Median effective concentration;
EPA = Environmental Protection Agency;
GHS = Globally Harmonized System of Classification and Labelling of Chemicals;
IATA = International Air Transport Association;
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
IC50 = Inhibition concentration, 50%;
IMDG = International Maritime Code for Dangerous Goods;
IARC = International Agency of Research on Cancer;
IATA = International Air Transport Association;
TSCA = Toxic Substance Control Act;
HMIS = Hazardous Materials Identification System;
NFPA = National Fire Protection Association;
NIOSH = National Institute for Occupational Safety and Health;
OSHA = Occupational Safety and Health Administration;
LC50 = Lethal concentration, 50%;
LD50 = Median lethal dose, 50%;
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
PBT = Persistent, Bioaccumulative and Toxic substance;
PNEC = Predicted No-Effect Concentration;
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
SARA = Superfund Amendments and Reauthorization Act;
TLV®/TWA = Threshold limit value – time-weighted average;
TLV®STEL = Threshold limit value – short-time exposure limit;
VOC = Volatile Organic Compounds;
vPvB = very Persistent and very Bioaccumulative;

### 16.2 Ratings

**NFPA Ratings**




TOP, FLAMMABILITY: 4 - Extreme Hazard
LEFT, HEALTH: 1 - Slight Hazard
RIGHT, REACTIVITY: 1 - Slight Hazard
BOTTOM, SPECIAL NOTICE: FLG - Flammable Gas

**HMIS Ratings**

| | |
|---|---|
| HEALTH | 1 |
| FLAMMABILITY | 4 |
| PHYSICAL HAZARD | 1 |
| PERSONAL PROTECTION | X |

1 - Slight Hazard
4 - Extreme Hazard
1 - Slight Hazard
X - Personal protection rating to be supplied by user depending on use conditions

PERSONAL PROTECTION:

A - Safety Glasses
B - Safety Glasses and Gloves
C - Safety Glasses, Gloves and Protection Apron
D - Face Shield, Gloves and Protection Apron
E - Safety Glasses, Gloves and Dust Respirator
F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
G - Safety Glasses, Gloves and Vapor Respirator.
H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
K - Airline Mask or Hood, Gloves, Full Suit and Boots.
X - Personal protection rating to be supplied by user depending on use conditions

**Modified position** None

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