

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name : Hempel's Silicone Acrylic
Product identity : 5694011150, 00138700
Product type : silicone acrylic paint

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

Field of application : metal industry
Identified uses : Consumer applications, Industrial applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S
Lundtoftegårdsvej 91
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com
Date of issue : 6 May 2025
Date of previous issue : 17 December 2024.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

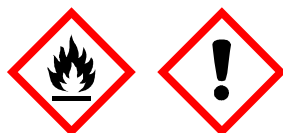
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 FLAMMABLE LIQUIDS
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION
Aquatic Chronic 3, H412 AQUATIC HAZARD (LONG-TERM)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning
Hazard statements : H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements :

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Wash thoroughly after handling.
Response : Take off contaminated clothing and wash it before reuse.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients : Not applicable.
Supplemental label elements : Contains isobutyl methacrylate. May produce an allergic reaction.
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.
Tactile warning of danger : Not applicable.

2.3 Other hazards

SECTION 2: Hazards identification

See Section 15 for details. EU - Substances of very high concern - PBT / vPvB

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|--|--|-----------|--|-------------|
| titanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2 | ≥10 - ≤25 | Carc. 2, H351 (inhalation) - | [1] [*] |
| Solvent naphtha (petroleum), light arom. | REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0 | ≥10 - <20 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | [1] |
| xylene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9 | ≥10 - ≤20 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 | [1] [2] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥1 - ≤3 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 | [1] [2] |
| trimethylolpropane | REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6 | ≤0.3 | Repr. 2, H361fd - | [1] |
| toluene | REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3 | ≤0.3 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 | [1] [2] |
| isobutyl methacrylate | EC: 202-613-0 CAS: 97-86-9 Index: 607-113-00-X | ≤0.3 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 STOT SE 3, H335 | [1] |
| octamethylcyclotetrasiloxane (D4) | REACH #: 01-2119529238-36 EC: 209-136-7 CAS: 556-67-2 Index: 014-018-00-1 | ≤0.044 | Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 M [Chronic] = 10 | [1] [3] [4] |
| See Section 16 for the full text of the H statements declared above. | | | | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|---------------|--|
| General : | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid). |
| Eye contact : | Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice. |
| Inhalation : | Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. |

SECTION 4: First aid measures

| | |
|------------------------------|--|
| Skin contact : | Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes. |
| Ingestion : | If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat. |
| Protection of first-aiders : | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

| | |
|----------------|---|
| Eye contact : | No known significant effects or critical hazards. |
| Inhalation : | No known significant effects or critical hazards. |
| Skin contact : | Causes skin irritation. |
| Ingestion : | No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| | |
|----------------|--|
| Eye contact : | Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation : | No specific data. |
| Skin contact : | Adverse symptoms may include the following: irritation redness |
| Ingestion : | No specific data. |

4.3 Indication of any immediate medical attention and special treatment needed

| | |
|-----------------------|---|
| Notes to physician : | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments : | No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

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|-----------------------|---|
| Extinguishing media : | Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used: waterjet. |
|-----------------------|---|

5.2 Special hazards arising from the substance or mixture

| | |
|---|---|
| Hazards from the substance or mixture : | Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous combustion products : | Decomposition products may include the following materials: carbon oxides metal oxide/oxides |

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|--|
| xylene | EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³. |
| ethylbenzene | EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m³. |
| toluene | EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm. |

SECTION 8: Exposure controls/personal protection

Biological exposure indices

| Product/ingredient name | Exposure limit values |
|--------------------------------|-----------------------|
| No exposure limit value known. | |

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

| Product/ingredient name | Type - Population - Exposure | Value | Effects |
|--|---|-------------------------|-------------------|
| Solvent naphtha (petroleum), light arom. | DNEL - Workers - Long term - Dermal | 12.5 mg/kg bw/day | Effects: Systemic |
| xylene | DNEL - Workers - Long term - Inhalation | 1.9 mg/m ³ | Effects: Systemic |
| ethylbenzene | DNEL - Workers - Long term - Inhalation | 77 mg/m ³ | Effects: Systemic |
| trimethylolpropane | DNEL - Workers - Long term - Dermal | 212 mg/kg bw/day | Effects: Systemic |
| toluene | DNEL - Workers - Long term - Dermal | 180 mg/kg bw/day | Effects: Systemic |
| isobutyl methacrylate | DNEL - Workers - Long term - Inhalation | 77 mg/m ³ | Effects: Systemic |
| octamethylcyclotetrasiloxane (D4) | DNEL - Workers - Long term - Dermal | 0.94 mg/kg bw/day | Effects: Systemic |
| | DNEL - Workers - Long term - Inhalation | 3.3 mg/m ³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 384 mg/kg bw/day | Effects: Systemic |
| | DNEL - Workers - Long term - Inhalation | 192 mg/m ³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 5 mg/kg bw/day | Effects: Systemic |
| | DNEL - Workers - Long term - Inhalation | 415.9 mg/m ³ | Effects: Systemic |
| | DNEL - Workers - Long term - Inhalation | 73 mg/m ³ | Effects: Systemic |

Predicted effect concentrations

| Product/ingredient name | Compartment Detail | Value |
|-----------------------------------|------------------------|----------------|
| xylene | Fresh water | 0.327 mg/l |
| | Marine water | 0.327 mg/l |
| | Fresh water sediment | 12.46 mg/kg |
| | Marine water sediment | 12.46 mg/kg |
| | Soil | 2.31 mg/kg |
| ethylbenzene | Sewage Treatment Plant | 6.68 mg/l |
| | Fresh water | 0.1 mg/l |
| | Marine water | 0.01 mg/l |
| | Sewage Treatment Plant | 9.6 mg/l |
| | Fresh water sediment | 13.7 mg/kg |
| toluene | Soil | 2.68 mg/kg |
| | Fresh water | 0.68 mg/l |
| | Marine water | 0.68 mg/l |
| | Sewage Treatment Plant | 13.61 mg/l |
| | Fresh water sediment | 16.39 mg/kg |
| | Marine water sediment | 16.39 mg/kg |
| octamethylcyclotetrasiloxane (D4) | Soil | 2.89 mg/kg |
| | Fresh water | 1.5 µg/l |
| | Fresh water | 0.15 µg/l |
| | Sewage Treatment Plant | 10 mg/l |
| | Fresh water sediment | 3 mg/kg dwt |
| | Marine water sediment | 0.3 mg/kg dwt |
| | Soil | 0.84 mg/kg dwt |

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

SECTION 8: Exposure controls/personal protection




| | |
|--------------------------|---|
| Eye/face protection : | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. |
| Hand protection : | <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.</p> <p>Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:</p> <p>Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton® May be used: nitrile rubber (>0.3 mm) Short term exposure: neoprene rubber (>0.1 mm), butyl rubber (>0.5 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm), butyl rubber (>0.3 mm)</p> |
| Body protection : | <p>Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.</p> <p>Wear suitable protective clothing. Always wear protective clothing when spraying.</p> |
| Respiratory protection : | <p>When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.</p> |

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Physical state : | Liquid. | | | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------|------------------------|------------------------|--------|--|-----------|-----------|-----------------|-------|-----|--------|-------|-----|--------|--|-----|------|--|--|--|--|
| Color : | Gray | | | | | | | | | | | | | | | | | | | | | |
| Odor : | Solvent-like | | | | | | | | | | | | | | | | | | | | | |
| pH : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Melting point/freezing point : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Boiling point/boiling range : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Flash point : | Closed cup: 25°C (77°F) | | | | | | | | | | | | | | | | | | | | | |
| Evaporation rate : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Flammability : | Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. | | | | | | | | | | | | | | | | | | | | | |
| Vapor pressure : | <table><tr><td></td><th colspan="3">Vapor Pressure at 20°C</th><th colspan="3">Vapor pressure at 50°C</th></tr><tr><th>Ingredient name</th><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td>xylene</td><td>6.7</td><td>0.89</td><td></td><td></td><td></td><td></td></tr></table> | | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | | Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |  xylene | 6.7 | 0.89 | | | | |
| | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | | | | | | | | | | | | | | | | | |
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method | | | | | | | | | | | | | | | | |
|  xylene | 6.7 | 0.89 | | | | | | | | | | | | | | | | | | | | |
| Vapor density : | Not available. | | | | | | | | | | | | | | | | | | | | | |
| Specific gravity : | 1.36 g/cm³ | | | | | | | | | | | | | | | | | | | | | |
| Partition coefficient (LogKow) : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Auto-ignition temperature : | <table><tr><th>Ingredient name</th><th>°C</th><th>°F</th><th>Method</th></tr><tr><td>Solvent naphtha (petroleum), light arom.</td><td>280 - 470</td><td>536 - 878</td><td></td></tr></table> | Ingredient name | °C | °F | Method | Solvent naphtha (petroleum), light arom. | 280 - 470 | 536 - 878 | | | | | | | | | | | | | | |
| Ingredient name | °C | °F | Method | | | | | | | | | | | | | | | | | | | |
| Solvent naphtha (petroleum), light arom. | 280 - 470 | 536 - 878 | | | | | | | | | | | | | | | | | | | | |
| Decomposition temperature : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Viscosity : | Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Explosive properties : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |
| Oxidizing properties : | Testing not relevant or not possible due to nature of the product. | | | | | | | | | | | | | | | | | | | | | |

SECTION 9: Physical and chemical properties

9.2 Other information

| | |
|--------------------------|------------------------------|
| Solvent(s) % by weight : | Weighted average: 30 % |
| Water % by weight : | Weighted average: 0 % |
| VOC content : | 404.4 g/l |
| TOC Content : | Weighted average: 363 g/l |
| Solvent Gas : | Weighted average: 0.088 m³/l |

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

| Product/ingredient name | Result | Dose / Exposure | Effects |
|--|--|---|--|
| titanium dioxide | Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists | >5000 mg/kg >5000 mg/kg >6.8 mg/l [4 hours] | |
| Solvent naphtha (petroleum), light arom. | Rat - Oral - LD50 | 3492 mg/kg | |
| | Rabbit - Dermal - LD50 | 3160 mg/kg | |
| | Rat - Inhalation - LC50 Vapor | 6193 mg/m³ [4 hours] | |
| xylene | Rabbit - Dermal - LD50 | >4200 mg/kg | |
| | Rat - Oral - LD50 | 3523 mg/kg | |
| | Rat - Inhalation - LC50 Vapor | 6350 ppm [4 hours] | |
| | Rat - Inhalation - LC50 Gas. | 5000 ppm [4 hours] | |
| ethylbenzene | Rat - Oral - LD50 | 3500 mg/kg | Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes |
| | Rabbit - Dermal - LD50 | >5000 mg/kg | |
| trimethylolpropane | Rat - Oral - LD50 | 14100 mg/kg | Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Dyspnea Lung, Thorax, or Respiration - Respiratory depression |

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|-----------------------------------|---|--------------------|
| toluene | Rat - Oral - LD50 | 636 mg/kg |
| octamethylcyclotetrasiloxane (D4) | Rat - Inhalation - LC50 Vapor | >20 mg/l [4 hours] |
| | Rat - Oral - LD50 | >4800 mg/kg |
| | Rat - Dermal - LD50 | >2400 mg/kg |
| | Rat - Inhalation - LC50 Dusts and mists | 36 mg/l [4 hours] |

Acute toxicity estimates

| Product/ingredient name | Oral mg/kg | Dermal mg/kg | Inhalation (gases) ppm | Inhalation (vapors) mg/l | Inhalation (dusts and mists) mg/l |
|--|------------|--------------|------------------------|--------------------------|-----------------------------------|
| Hempel's Silicone Acrylic | | 9902.5 | 36207.2 | 452.5 | |
| Solvent naphtha (petroleum), light arom. | 3492 | 3160 | | | |
| xylene | 3523 | 1100 | 5000 | 11 | |
| ethylbenzene | 3500 | | 4500 | | |
| trimethylolpropane | 14100 | | | | |
| octamethylcyclotetrasiloxane (D4) | | | | | 36 |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Exposure |
|--|--|--|--|
| titanium dioxide | Human - Skin - Mild irritant | Duration of treatment/ exposure: 72 hours | Amount/concentration applied: 300 Micrograms Intermittent |
| Solvent naphtha (petroleum), light arom. | Rabbit - Eyes - Mild irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 100 microliters |
| xylene | Rabbit - Respiratory - Mild irritant Rabbit - Skin - Moderate irritant Rabbit - Eyes - Severe irritant | Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 5 milligrams Amount/concentration applied: 500 milligrams |
| ethylbenzene | Rabbit - Skin - Irritant Rabbit - Skin - Mild irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 15 milligrams |
| toluene | Rabbit - Respiratory - Mild irritant Rabbit - Eyes - Mild irritant Rabbit - Eyes - Mild irritant | Duration of treatment/ exposure: 0.5 minutes Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 100 mg Amount/concentration applied: 20 mg |
| octamethylcyclotetrasiloxane (D4) | Rabbit - Skin - Moderate irritant | | |
| | Rabbit - Eyes - Mild irritant Rabbit - Skin - Mild irritant | Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 500 milligrams Amount/concentration applied: 500 milligrams |

Sensitizer

No known data available in our database.

Mutagenic effects

No known data available in our database.

Carcinogenicity

No known data available in our database.

Reproductive toxicity

No known data available in our database.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| Solvent naphtha (petroleum), light arom. | Category 3 | | Respiratory tract irritation |
| toluene | Category 3 | | Narcotic effects |
| | Category 3 | | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene | Category 2 | - | hearing organs |
| toluene | Category 2 | - | - |

Aspiration hazard

SECTION 11: Toxicological information

| Product/ingredient name | Result |
|---|--|
| Solvent naphtha (petroleum), light arom. ethylbenzene toluene | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

| Product/ingredient name | Result | Species | Exposure |
|--|------------------------------|--|-------------------------|
| titanium dioxide | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| | Acute - LC50 | Daphnia | >100 mg/l [48 hours] |
| Solvent naphtha (petroleum), light arom. | Acute - LC50 | Fish - <i>Oncorhynchus mykiss</i> (rainbow trout) | 9.22 mg/l [96 hours] |
| | Acute - EC50 | Algae - <i>Pseudokirchneriella subcapitata</i> (green algae) | 2.6 mg/l [96 hours] |
| ethylbenzene | Acute - EC50 | Daphnia | 3.2 mg/l [48 hours] |
| | Chronic - NOEC - Fresh water | Algae - Green algae - <i>Pseudokirchneriella subcapitata</i> | <1000 µg/l [96 hours] |
| toluene | Chronic - NOEC - Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> | 1000 µg/l [21 days] |
| | Chronic - NOEC - Fresh water | Algae - Green algae - <i>Pseudokirchneriella subcapitata</i> | <500000 µg/l [96 hours] |
| octamethylcyclotetrasiloxane (D4) | Chronic - NOEC - Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> | 1.7 - 15 µg/l [21 days] |
| | Chronic - NOEC - Fresh water | Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i> - Egg | 4.4 µg/l [93 days] |
| | Acute - LC50 | Fish | >0.022 mg/l [96 hours] |
| | Acute - EC50 | Daphnia | 0.015 mg/l [48 hours] |
| | Acute - EC50 | Algae | >0.022 mg/l [96 hours] |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result |
|--|--|--|
| Solvent naphtha (petroleum), light arom. | | >70% [28 days] - Readily |
| | OECD Ready Biodegradability - Manometric Respirometry Test | >60% [28 days] - Readily 78% [28 days] - Readily |
| xylene | OECD Ready Biodegradability - Manometric Respirometry Test | >60% [28 days] - Readily 90 - 98% [28 days] - Readily |
| ethylbenzene | OECD Inherent Biodegradability: Zahn-Wellens/EMPA Test | >70% [28 days] - Readily 100% [28 days] - Readily |
| trimethylolpropane | | |
| toluene | | 100% [14 days] - Readily |
| octamethylcyclotetrasiloxane (D4) | OECD Ready Biodegradability - CO ₂ in Sealed Vessels (Headspace Test) | 3.7% [28 days] - Not readily |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Solvent naphtha (petroleum), light arom. | | | Readily |
| xylene | | | Readily |
| ethylbenzene | | | Readily |
| trimethylolpropane | | | Readily |
| toluene | | | Readily |
| octamethylcyclotetrasiloxane (D4) | | | Not readily |

SECTION 12: Ecological information

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|------------|-----------|
| Solvent naphtha (petroleum), light arom. | - | 10 - 2500 | High |
| xylene | 3.12 | 8.1 - 25.9 | Low |
| ethylbenzene | 3.6 | - | Low |
| trimethylolpropane | -0.47 | <1 | Low |
| toluene | 2.73 | 90 | Low |
| isobutyl methacrylate | 2.95 | - | Low |
| octamethylcyclotetrasiloxane (D4) | 6.488 | 13400 | High |

12.4 Mobility in soil

Soil/Water partition coefficient

| Product/ingredient name | logK _{oc} | K _{oc} |
|-----------------------------------|--------------------|-----------------|
| xylene | 1.59 | 39 |
| ethylbenzene | 2.23 | 170.406 |
| trimethylolpropane | 1.22 | 16.5101 |
| toluene | 2.07 | 117.115 |
| isobutyl methacrylate | 1.58 | 38.4154 |
| octamethylcyclotetrasiloxane (D4) | 3.49 | 3064.9 |

Results of PMT and vPvM assessment

| Product/ingredient name | PMT | P | M | T | vPvM | vP | vM |
|--|-----|-----|-----|-----|------|-----|-----|
| Titanium dioxide | No | No | No | No | No | No | No |
| Solvent naphtha (petroleum), light arom. | No | No | No | No | No | No | No |
| xylene | No | No | Yes | No | No | No | Yes |
| ethylbenzene | No | No | Yes | Yes | No | No | No |
| trimethylolpropane | No | No | Yes | Yes | No | No | Yes |
| toluene | No | No | Yes | Yes | No | No | No |
| isobutyl methacrylate | No | No | Yes | No | No | No | Yes |
| octamethylcyclotetrasiloxane (D4) | No | Yes | No | Yes | No | Yes | No |

Mobility : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

See Section 15 for details. EU - Substances of very high concern - PBT / vPvB

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.




European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

| | 14.1 UN / ID no. | 14.2 Proper shipping name | 14.3 Transport hazard class(es) | 14.4 PG* | 14.5 Env* | Additional information |
|----------------------|---------------------|------------------------------|--|-------------|--------------|--|
| ADR/RID Class | UN1263 | PAINT | 3  | III | No. | <u>Tunnel code</u> (D/E) |
| IMDG Class | UN1263 | PAINT | 3  | III | No. | <u>Emergency schedules</u> F-E, S-E |
| IATA Class | UN1263 | PAINT | 3  | III | No. | - |

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

| Ingredient name | Intrinsic property | Status | Reference number | Date of revision |
|-----------------------------------|--------------------|-------------|------------------|------------------|
| octamethylcyclotetrasiloxane (D4) | PBT | Recommended | ED/71/2019 | 4/14/2021 |
| octamethylcyclotetrasiloxane (D4) | vPvB | Recommended | ED/71/2019 | 4/14/2021 |

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category

This product is controlled under the Seveso III Directive.

| Seveso category |
|---|
| P5c: Flammable liquids 2 and 3 not falling under P5a or P5b |

15.2 Chemical Safety Assessment

-

SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 EUH statement = CLP-specific Hazard statement
 RRN = REACH Registration Number
 DNEL = Derived No Effect Level
 PNEC = Predicted No Effect Concentration

SECTION 16: Other information

| | | |
|--|-------------------|--|
| Full text of abbreviated H statements : | H225 | Highly flammable liquid and vapor. |
| | H226 | Flammable liquid and vapor. |
| | H304 | May be fatal if swallowed and enters airways. |
| | H312 | Harmful in contact with skin. |
| | H315 | Causes skin irritation. |
| | H317 | May cause an allergic skin reaction. |
| | H332 | Harmful if inhaled. |
| | H335 | May cause respiratory irritation. |
| | H336 | May cause drowsiness or dizziness. |
| | H351 | Suspected of causing cancer. |
| | H361d | Suspected of damaging the unborn child. |
| | H361f | Suspected of damaging fertility. |
| | H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| | H373 | May cause damage to organs through prolonged or repeated exposure. |
| | H410 | Very toxic to aquatic life with long lasting effects. |
| | H411 | Toxic to aquatic life with long lasting effects. |
| | H412 | Harmful to aquatic life with long lasting effects. |
| Full text of classifications [CLP/GHS] : | EUH066 | Repeated exposure may cause skin dryness or cracking. |
| | Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| | Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| | Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| | Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| | Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| | Carc. 2 | CARCINOGENICITY - Category 2 |
| | Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| | Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| | Repr. 2 | TOXIC TO REPRODUCTION - Category 2 |
| | Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| | Skin Sens. 1B | SKIN SENSITIZATION - Category 1B |
| | STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| | STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|--|---|
| FLAMMABLE LIQUIDS SKIN CORROSION/IRRITATION AQUATIC HAZARD (LONG-TERM) | On basis of test data Calculation method Calculation method |

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to : Professional spray painting and/or low-energy painting, local effect - Level II
Skin Sens. 1, Eye Irrit. 2, Asp. Tox. 1 or Solvent.

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor or outdoor use

Risk management measures (RMM)

| Contributing activity | Process category (ies) | Maximum duration | Ventilation | | Respiratory | Eye | Hands |
|---|------------------------|-------------------|--|-------|--|---|---------------------------------------|
| | | | Type and air changes per hour | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08a | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by brush or roller | PROC10 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by spraying | PROC11 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08a | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See section 8 of this Safety Data Sheet for specifications.

