

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 Polyenamel 55107 Base
Product identity : 5510700010, 0013823E
Product type : polyurethane paint (base for multi-component product)

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

Field of application : metal industry yacht. buildings, ships and shipyards.
Ready-for-use mixture : 55102 = 55107 4LI / 95304 LI
Identified uses : Consumer applications, Industrial applications, Professional 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 : 9 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 Sens. 1, H317 SKIN SENSITIZATION
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)
STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)
Aquatic Chronic 2, H411 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.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor.
Response : Collect spillage. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.
Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Hazardous ingredients : Solvent naphtha (petroleum), light arom.
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Supplemental label elements : Repeated exposure may cause skin dryness or cracking.
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

This mixture does not contain any substances that are assessed to be a PBT or a 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 | ≥25 - ≤50 | Carc. 2, H351 (inhalation) - | [1] [*] |
| Solvent naphtha (petroleum), light arom. | REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0 | ≥25 - ≤50 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 - | [1] |
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | ≥3 - ≤5 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 - | [1] [2] |
| mesitylene | REACH #: 01-2119463878-19 EC: 203-604-4 CAS: 108-67-8 | ≥1 - ≤3 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335: C ≥ 25% - | [1] [2] |
| Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | REACH #: 01-2119491304-40 CAS: 1065336-91-5 | ≤1 | Skin Sens. 1A, H317 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 M [Acute] = 1 M [Chronic] = 1 | [1] |
| trimethylolpropane | REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6 | ≤1 | Repr. 2, H361fd - | [1] |
| 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.

[*] 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. |
| 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

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 : | Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. |
| Skin contact : | Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction. |
| Ingestion : | Can cause central nervous system (CNS) depression. |

Over-exposure signs/symptoms

| | |
|----------------|---|
| Eye contact : | No specific data. |
| Inhalation : | Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness |
| Skin contact : | Adverse symptoms may include the following: irritation redness dryness cracking |
| 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

| | |
|-----------------------|---|
| 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

SECTION 5: Firefighting measures

| | |
|---|---|
| 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 toxic 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 |
|-------------------------|---|
| n-butyl acetate | EU OEL (Europe, 1/2022) STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m ³ . TWA 8 hours: 241 mg/m ³ . TWA 8 hours: 50 ppm. EU OEL (Europe, 1/2022) TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m ³ . |
| mesitylene | |

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 |
| n-butyl acetate | DNEL - Workers - Long term - Inhalation | 1.9 mg/m ³ | Effects: Systemic |
| trimethylolpropane | DNEL - Workers - Long term - Inhalation | 300 mg/m ³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 11 mg/kg bw/day | Effects: Systemic |
| | 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 |

Predicted effect concentrations

| Product/ingredient name | Compartment Detail | Value |
|-------------------------|------------------------|--------------|
| n-butyl acetate | Fresh water | 0.18 mg/l |
| | Marine | 0.018 mg/l |
| | Fresh water sediment | 0.981 mg/kg |
| | Marine water sediment | 0.0981 mg/kg |
| | Soil | 0.0903 mg/kg |
| | Sewage Treatment Plant | 35.6 mg/l |

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. |
| 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: safety glasses with side-shields. |
| Hand protection : | 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. |

SECTION 8: Exposure controls/personal protection

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:

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)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection : 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.

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 : White

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: 35°C (95°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidizing materials.

| | | | | | | | |
|------------------|--|------------------------|-------------|--------|------------------------|-----|--------|
| Vapor pressure : | | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | |
| | Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | Solvent naphtha (petroleum), light arom. | 0.8 - 4.6 | 0.11 - 0.61 | | | | |

Vapor density : Not available.

Specific gravity : 1.27 g/cm³

Partition coefficient (LogKow) : Testing not relevant or not possible due to nature of the product.

| | Ingredient name | °C | °F | Method |
|-----------------------------|--|-----------|-----------|--------|
| | Solvent naphtha (petroleum), light arom. | 280 - 470 | 536 - 878 | |
| Auto-ignition temperature : | | | | |

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 : Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 34 %

Water % by weight : Weighted average: 0 %

VOC content : 428.8 g/l

SECTION 9: Physical and chemical properties

VOC content, Ready-for-use mixture : 431 g/l

TOC Content : Weighted average: 367 g/l

Solvent Gas : Weighted average: 0.09 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.

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] | Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Dyspnea Lung, Thorax, or Respiration - Respiratory depression |
| Solvent naphtha (petroleum), light arom. | Rat - Oral - LD50 | 3492 mg/kg | |
| n-butyl acetate | Rabbit - Dermal - LD50 | 3160 mg/kg | |
| | Rat - Inhalation - LC50 Vapor | 6193 mg/m³ [4 hours] | |
| | Rat - Oral - LD50 | 10768 mg/kg | |
| | Rabbit - Dermal - LD50 | >14112 mg/kg | |
| mesitylene | Rat - Inhalation - LC50 Vapor | >21 mg/l [4 hours] | |
| trimethylolpropane | Rat - Oral - LD50 | 5000 mg/kg | |
| | Rat - Inhalation - LC50 Vapor | 24000 mg/m³ [4 hours] | |
| | Rat - Oral - LD50 | 14100 mg/kg | |

Acute toxicity estimates

SECTION 11: Toxicological information

| Product/ingredient name | Oral mg/kg | Dermal mg/kg | Inhalation (gases) ppm | Inhalation (vapors) mg/l | Inhalation (dusts and mists) mg/l |
|---|--------------------------------|-----------------|------------------------------|--------------------------------|--|
| Solvent naphtha (petroleum), light arom. n-butyl acetate mesitylene trimethylolpropane | 3492 10768 5000 14100 | 3160 | | 24 | |

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 |
| n-butyl acetate | Rabbit - Respiratory - Mild irritant Rabbit - Skin - Moderate irritant Rabbit - Skin - Moderate irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 500 mg |
| mesitylene | Rabbit - Eyes - Mild irritant Rabbit - Respiratory - Mild irritant Rabbit - Eyes - Mild irritant Rabbit - Skin - Moderate irritant | Duration of treatment/ exposure: 24 hours Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 500 milligrams Amount/concentration applied: 20 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. n-butyl acetate mesitylene | Category 3 Category 3 Category 3 Category 3 | | Respiratory tract irritation Narcotic effects Narcotic effects Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|----------|-------------------|---------------|
| No known data available in our database. | | | |

Aspiration hazard

| Product/ingredient name | Result |
|--|--|
| Solvent naphtha (petroleum), light arom. mesitylene | 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. Toxic to aquatic life with long lasting effects.

| Product/ingredient name | Result | Species | Exposure |
|--|------------------------------|--|-------------------------------|
| titanium dioxide | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| Solvent naphtha (petroleum), light arom. | Acute - LC50 | Daphnia | >100 mg/l [48 hours] |
| | 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] |
| n-butyl acetate | Acute - EC50 | Daphnia | 3.2 mg/l [48 hours] |
| | Acute - EC50 | Daphnia | 44 mg/l [48 hours] |
| | Acute - EC50 | Algae | 648 mg/l [72 hours] |
| mesitylene | Acute - LC50 - Marine water | Crustaceans - Dungeness or edible crab - <i>Cancer magister</i> - Zoea | 13000 µg/l [48 hours] |
| | Acute - LC50 - Fresh water | Fish - Goldfish - <i>Carassius auratus</i> | 12520 - 15050 µg/l [96 hours] |
| | Chronic - NOEC - Fresh water | Daphnia - Water flea - <i>Daphnia magna</i> | 400 µg/l [21 days] |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result |
|--|--|---|
| Solvent naphtha (petroleum), light arom. | | >70% [28 days] - Readily |
| n-butyl acetate | OECD Ready Biodegradability - Manometric Respirometry Test | >60% [28 days] - Readily 78% [28 days] - Readily |
| trimethylolpropane | OECD Ready Biodegradability - Closed Bottle Test OECD Inherent Biodegradability: Zahn-Wellens/EMPA Test | 90% [28 days] - Readily 80% [5 days] - Readily 100% [28 days] - Readily |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Solvent naphtha (petroleum), light arom. | | | Readily |
| n-butyl acetate | | | Readily |
| trimethylolpropane | | | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-----------|-----------|
| Solvent naphtha (petroleum), light arom. | - | 10 - 2500 | High |
| n-butyl acetate | 2.3 | 3.1 | Low |
| mesitylene | 3.42 | 161 | Low |
| trimethylolpropane | -0.47 | <1 | Low |

12.4 Mobility in soil

Soil/Water partition coefficient

| Product/ingredient name | logK _{oc} | K _{oc} |
|-------------------------|--------------------|-----------------|
| n-butyl acetate | 1.52 | 33.2139 |
| mesitylene | 2.82 | 658.527 |
| trimethylolpropane | 1.22 | 16.5101 |

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 |
| n-butyl acetate | No | No | Yes | No | No | No | Yes |
| mesitylene | No | No | Yes | No | No | No | No |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | No | No | No | Yes | No | No | No |
| trimethylolpropane | No | No | Yes | Yes | No | No | Yes |

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

12.5 Results of PBT and vPvB assessment

SECTION 12: Ecological information

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

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|--|-----|----|----|-----|------|----|----|
| Titanium dioxide | No | No | No | No | No | No | No |
| Solvent naphtha (petroleum), light arom. | No | No | No | No | No | No | No |
| n-butyl acetate | No | No | No | No | No | No | No |
| mesitylene | No | No | No | No | No | No | No |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | No | No | No | Yes | No | No | No |
| trimethylolpropane | No | No | No | Yes | No | No | No |

Regulation (EC) No. 1272/2008 [CLP]

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|--|-----|----|----|-----|------|----|----|
| Titanium dioxide | No | No | No | No | No | No | No |
| Solvent naphtha (petroleum), light arom. | No | No | No | No | No | No | No |
| n-butyl acetate | No | No | No | No | No | No | No |
| mesitylene | No | No | No | No | No | No | No |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | No | No | No | Yes | No | No | No |
| trimethylolpropane | No | No | No | Yes | No | No | No |

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or 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 | Yes. The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (E) Remarks H-14 |
| IMDG Class | UN1263 | PAINT. (Solvent naphtha (petroleum), light arom.) | 3   | III | Yes. The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E |

SECTION 14: Transport information

| | | | | | | |
|-------------------|--------|-------|---|---|-----|---|
| IATA Class | UN1263 | PAINT | 3 |  | III | Yes. The environmentally hazardous substance mark may appear if required by other transportation regulations. |
|-------------------|--------|-------|---|---|-----|---|

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

None of the components are listed.

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 E2: Hazardous to the aquatic environment - Chronic 2 |

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

| | | |
|---|--------|--|
| Full text of abbreviated H statements : | H226 | Flammable liquid and vapor. |
| | H304 | May be fatal if swallowed and enters airways. |
| | H315 | Causes skin irritation. |
| | H317 | May cause an allergic skin reaction. |
| | H319 | Causes serious eye irritation. |
| | H335 | May cause respiratory irritation. |
| | H336 | May cause drowsiness or dizziness. |
| | H351 | Suspected of causing cancer. |
| | H361 | Suspected of damaging fertility or the unborn child. |
| | H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| | H400 | Very toxic to aquatic life. |
| | H410 | Very toxic to aquatic life with long lasting effects. |
| | H411 | Toxic to aquatic life with long lasting effects. |
| | EUH066 | Repeated exposure may cause skin dryness or cracking. |

| | | |
|--|-------------------|---|
| Full text of classifications [CLP/GHS] : | Aquatic Acute 1 | AQUATIC HAZARD (ACUTE) - Category 1 |
| | Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| | Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| | Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| | Carc. 2 | CARCINOGENICITY - Category 2 |
| | Eye Irrit. 2 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| | Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| | Repr. 2 | TOXIC TO REPRODUCTION - Category 2 |
| | Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |

SECTION 16: Other information

| | |
|---------------|---|
| Skin Sens. 1 | SKIN SENSITIZATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITIZATION - Category 1A |
| 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 | On basis of test data |
| SKIN SENSITIZATION | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) | Calculation method |
| AQUATIC HAZARD (LONG-TERM) | 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.

Safe Use of Mixture Information

Hempel's Polyenamel 55107 Base



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.

