# SAFETY DATA SHEET

**Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013**

**Date of issue/Date of revision** 23 October 2026

**Version** 1.1

## Section 1. Chemical product and company identification

| | | |
|---|---|---|
| **Product code** | : | 000010023024 |
| **Product name** | : | SIGMARINE 48 GREEN 4171 |
| **Product name** | : | SIGMARINE 48 GREEN 4171 |
| **Other means of identification** | : | 00332657 |
| **Product type** | : | Liquid. |

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

| | | |
|---|---|---|
| **Product use** | : | Professional applications, Used by spraying. |
| **Use of the substance/ mixture** | : | Coating. |
| **Uses advised against** | : | Not applicable. |

**Supplier's details** : PPG Coatings (Kunshan) Co., Ltd
53 Jinyang Road, Lujia Town,
215331 Kunshan City, Jiangsu Province, P.R. China
Tel: 86 512 57678859 Fax: 86 512 57678857

**Emergency telephone number (with hours of operation)** : 00 86 532 83889090

## Section 2. Hazards identification

**Classification of the substance or mixture according to GB 30000.1-30**

**Emergency overview**

Liquid.
Characteristic.

Combustible liquid.
May be harmful in contact with skin.
Causes skin irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical advice or attention.

**See Section 12 for environmental precautions.**

# Section 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (dermal) - Category 5
SKIN CORROSION/IRRITATION - Category 2
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 46.2%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 38.3%

## GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Combustible liquid.
May be harmful in contact with skin.
Causes skin irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

## Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from flames and hot surfaces. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

**Response** : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Physical and chemical hazards** : Combustible liquid.

# Section 2. Hazards identification

**Health hazards** : Causes skin irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Environmental hazards** : Toxic to aquatic life with long lasting effects.

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

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : 00332657

## CAS number/other identifiers

**CAS number** : Not applicable.

| Ingredient name | % | CAS number |
|---|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy | 25 - <40 | 64742-82-1 |
| Talc , not containing asbestiform fibres | 1 - <10 | 14807-96-6 |
| 2-ethylhexanoic acid, zirconium salt | 1 - <10 | 22464-99-9 |
| ethylbenzene | 0.1 - <1 | 100-41-4 |
| 2-butanone oxime | 0.1 - <1 | 96-29-7 |
| 2-ethylhexanoic acid, cobalt salt | 0.1 - <1 | 13586-82-8 |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 0.1 - <1 | 100545-48-0 |
| calcium bis(2-ethylhexanoate) | 0.1 - <1 | 136-51-6 |
| 2-ethylhexanoic acid | 0.1 - <1 | 149-57-5 |

**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.**

**Occupational exposure limits, if available, are listed in Section 8.**

**SUB codes represent substances without registered CAS Numbers.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

**Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

## Most important symptoms/effects, 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.

**Skin contact** : May be harmful in contact with skin. Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

# Section 4. First aid measures

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**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.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Combustible liquid. 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 thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

# Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** : 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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. Collect spillage.

## Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

**Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

# Section 7. Handling and storage

Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

**Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| | |
|---|---|
| Talc , not containing asbestiform fibres | **GBZ 2.1 (China, 7/2024)**<br>PC-TWA 8 hours: 3 mg/m³. Form: total dust.<br>PC-TWA 8 hours: 1 mg/m³. Form: respirable dust. |
| 2-ethylhexanoic acid, zirconium salt | **GBZ 2.1 (China, 7/2024) [Zirconium and compounds]**<br>PC-TWA 8 hours: 5 mg/m³ (as Zr).<br>PC-STEL 15 minutes: 10 mg/m³ (as Zr). |
| ethylbenzene | **GBZ 2.1 (China, 7/2024)**<br>PC-TWA 8 hours: 100 mg/m³.<br>PC-STEL 15 minutes: 150 mg/m³. |
| 2-ethylhexanoic acid, cobalt salt | **ACGIH TLV (United States, 1/2026) [cobalt and inorganic compounds]** Skin sensitizer , Inhalation sensitizer.<br>TWA 8 hours: 0.02 mg/m³ (as Co). |
| 2-ethylhexanoic acid | **ACGIH TLV (United States, 1/2026)**<br>TWA 8 hours: 5 mg/m³. Form: Inhalable fraction and vapor. |

### Biological exposure indices

| Ingredient name | Exposure indices |
|---|---|
| ethylbenzene | **GBZ 2.1 (China, 11/2022)**<br>BEI: 0.8 g/g Cr, mandelic acid and phenylglyoxylic acid (MA and PGA) [in urine]. Sampling time: end of work shift. |

# Section 8. Exposure controls/personal protection

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**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.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye protection** : Chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber, neoprene

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

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : 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 workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

# Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid.

**Color** : Not available.

**Odor** : Characteristic.

**Odor threshold** : Not available.

**pH** : Not applicable.

**Melting point/freezing point** : Not available.

**Boiling point** : >37.78°C (>100°F)

**Flash point** : Closed cup: 62°C (143.6°F)

**Evaporation rate** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Relative density** : 1.03

**Solubility(ies)** :

| Media | Result |
|---|---|
| cold water | Not soluble |

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): >21 $mm^2/s$

# Section 10. Stability and reactivity

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

**Chemical stability** : The product is stable.

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

**Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.

**Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

**Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Dose |
|---|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy | Rat - Oral - LD50 | >5000 mg/kg |
| - | Rabbit - Dermal - LD50 | >2000 mg/kg |
| 2-ethylhexanoic acid, zirconium salt | Rabbit - Dermal - LD50 | >5 g/kg |
| - | Rat - Oral - LD50 | >5 g/kg |
| ethylbenzene | Rat - Oral - LD50 | 3.5 g/kg |
| - | Rabbit - Dermal - LD50 | 17.8 g/kg |
| - | Rat - Inhalation - LC50 Vapor | 17.8 mg/l [4 hours] |
| 2-butanone oxime | Rabbit - Dermal - LD50 | 1100 mg/kg |
| - | Rat - Oral - LD50 | 100 mg/kg |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Rat - Oral - LD50 | >2000 mg/kg |
| - | Rat - Inhalation - LC50 Dusts and mists | 5.05 mg/l [4 hours] |
| 2-ethylhexanoic acid | Rat - Oral - LD50 | 3640 mg/kg |
| - | Rat - Dermal - LD50 | >2000 mg/kg |

**Product Conclusion** : There are no data available on the mixture itself.

### Skin corrosion/irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

### Serious eye damage/eye irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

### Respiratory corrosion/irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

### Sensitization

| Product/ingredient name | Species | Result |
|---|---|---|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Guinea pig - skin | Sensitizing |

**Skin**

**Conclusion/Summary** : There are no data available on the mixture itself.

**Respiratory**

**Conclusion/Summary** : There are no data available on the mixture itself.

### Mutagenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Carcinogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Classification

| Product/ingredient name | IARC |
|---|---|
| Talc , not containing asbestiform fibres | 2A |
| ethylbenzene | 2B |

### Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Specific target organ toxicity (single exposure)

# Section 11. Toxicological information

| Product/ingredient name | Result |
|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy<br>Talc , not containing asbestiform fibres | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |

## Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result |
|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy<br>ethylbenzene | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

## Aspiration hazard

| Product/ingredient name | Result |
|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy<br>ethylbenzene | ASPIRATION HAZARD - Category 1<br><br>ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

## 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.

**Skin contact** : May be harmful in contact with skin. Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

# Section 11. Toxicological information

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

## Potential chronic health effects

**Conclusion/Summary** : There are no data available on the mixture itself.

**General** : Causes damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : May damage fertility or the unborn child.

## Numerical measures of toxicity

### 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) |
|---|---|---|---|---|---|
| SIGMARINE 48 GREEN 4171 | N/A | 3387.6 | N/A | N/A | N/A |
| Naphtha (petroleum), hydrodesulfurized heavy | N/A | 2500 | N/A | N/A | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | 1.5 |
| 2-butanone oxime | 100 | 1100 | N/A | N/A | N/A |
| 2-ethylhexanoic acid, cobalt salt | 500 | N/A | N/A | N/A | N/A |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 2500 | N/A | N/A | N/A | 5.05 |
| 2-ethylhexanoic acid | 3640 | 2500 | N/A | N/A | N/A |

**Other information** :

Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death.

# Section 12. Ecological information

## Toxicity

# Section 12. Ecological information

| Product/ingredient name | Result | Species | Dose / Exposure |
|---|---|---|---|
| 2-ethylhexanoic acid, zirconium salt | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| ethylbenzene | Acute - EC50 - Fresh water | Daphnia | 1.8 mg/l [48 hours] |
| | Chronic - NOEC - Fresh water | Daphnia - *Ceriodaphnia dubia* | 1 mg/l |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Acute - LC50 | Fish - *Oncorhynchus mykiss* | >10 mg/l [96 hours] |
| | Acute - EC50 | Daphnia - *Daphnia magna* | >10 mg/l [48 hours] |
| | Acute - EC50 | Algae - *Pseudokirchneriella subcapitata* | >100 mg/l [72 hours] |

**Conclusion/Summary** : Not available.

## Persistence/degradability

| Product/ingredient name | Test | Result | Dose / Inoculum |
|---|---|---|---|
| ethylbenzene | - | 79% [10 days] - Readily | |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Ready Biodegradability - Closed Bottle Test | 22% [28 days] | |

**Conclusion/Summary** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| ethylbenzene | - | - | Readily |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | - | - | Inherent |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Naphtha (petroleum), hydrodesulfurized heavy | - | 10 to 2500 | High |
| ethylbenzene | 3.6 | 79.43 | Low |
| 2-butanone oxime | 0.63 | 5.01 [OECD 305 C] | Low |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | >5.86 | - | High |
| 2-ethylhexanoic acid | 2.7 | - | Low |

## Mobility in soil

**Soil/Water partition coefficient** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 12. Ecological information

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# Section 14. Transport information

| | China | UN | IMDG | IATA |
|---|---|---|---|---|
| **UN number** | UN3082 | UN3082 | UN3082 | UN3082 |
| **UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PAINT) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PAINT) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PAINT) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PAINT) |
| **Transport hazard class(es)** | 9 | 9 | 9 | 9 |
| **Packing group** | III | III | III | III |
| **Environmental hazards** | Yes. | Yes. | Yes. | Yes. |
| **Marine pollutant substances** | Not applicable. | Not applicable. | (Naphtha (petroleum), hydrodesulfurized heavy) | Not applicable. |

**Additional information**

**CN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**UN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

## Section 14. Transport information

**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.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

**China inventory (IECSC)** : All components are listed or exempted.

**References** : Production Safety Law of the People's Republic of China
Code of Occupational Disease Prevention of the People's Republic of China
Ecological Environment Code of the People's Republic of China
Fire Control Law of the People's Republic of China
Hazardous Chemicals Safety Law of the People's Republic of China
Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1)
Specification for classification and labelling of chemicals according to Part 1: General rules (GB 30000.1-2024)
Safety data sheet for chemical products - Content and order of sections (GB/T16483)
Guidance on the compilation of safety data sheet for chemical products (GB/T17519)
General rule for preparation of precautionary label for chemicals (GB15258)
Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-30)

## Section 16. Other information

**History**

**Date of issue/Date of revision** : 23 October 2026

**Version** : 1.1

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**Prepared by** : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN = United Nations

# Section 16. Other information

**Indicates information that has changed from previously issued version.**

## Notice to reader

**The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.**