# SAFETY DATA SHEET

**Date of issue** 27 October 2026
**Version** 2.04

## Section 1. Product and company identification

**Product name** : SIGMA ECOFLEET 530 REDBROWN
**Product code** : 000001024175
**Other means of identification** : 00146095; 00242162
**Product type** : Liquid.

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

**Identified uses**
Coating. Paints. Painting-related materials.

| Uses advised against | Reason |
|---|---|
| Not applicable. | |

**Supplier's details:**

**Supplier** : PPG Industrial do Brasil – Tintas e Vernizes Ltda
Via Anhanguera KM 106, Bairro Sao Judas Tadeu
Sumare / SP, Brasil
55 19 2103-6000 (Recepção e Portaria)

**Email address:** : HazComLatam@ppg.com

**Emergency telephone number** :
0800 707 1767 / 0800 707 7022 – Empresa Suatrans Cotec
0800 14 8110 – CEATOX - Centro de Assistência Toxicológica

## Section 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1B
TOXIC TO REPRODUCTION - Category 2
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1

**Target organs** : Contains material which causes damage to the following organs: brain.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

# Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 4.9%
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 15.8%
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 22.3%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 9.9%

## GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Flammable liquid and vapor.
Harmful if swallowed or if inhaled.
May be harmful in contact with skin.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : 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 heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

**Response** : Collect spillage. 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. 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : Not applicable.

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

**Other hazards which do not result in classification** : Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : 00146095; 00242162

## CAS number/other identifiers

**CAS number** : Not applicable.

| Ingredient name | % | CAS number |
| --- | --- | --- |
| dicopper oxide | 30 - <60 | 1317-39-1 |
| zinc oxide | 10 - <12.5 | 1314-13-2 |
| rosin | 10 - <12.5 | 8050-09-7 |
| xylene | 7 - <10 | 1330-20-7 |
| 5-methylhexan-2-one | 5 - <7 | 110-12-3 |
| Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene | 3 - <5 | 25154-85-2 |
| diiron trioxide | 3 - <5 | 1309-37-1 |
| Talc , not containing asbestiform fibres | 3 - <5 | 14807-96-6 |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | 2 - <3 | 64359-81-5 |
| ethylbenzene | 1 - <2 | 100-41-4 |
| copper oxide | 1 - <2 | 1317-38-0 |
| copper | 0.5 - <1 | 7440-50-8 |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | 0.5 - <1 | 911674-82-3 |
| Cashew, nutshell liq. | 0.5 - <1 | 8007-24-7 |
| lead monoxide | 0 - <0.1 | 1317-36-8 |

**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** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

**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.

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

**Specific treatments** : The exposed person may need to be kept under medical surveillance for 48 hours. No specific treatment.

# Section 4. First aid measures

**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.

## Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : Harmful if inhaled.

**Skin contact** : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion** : Harmful if swallowed.

**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** : 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 very 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
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides
oxides of lead

**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. Avoid breathing vapor. Put on appropriate personal protective equipment. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

# Section 6. Accidental release measures

**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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**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

| Ingredient name | Exposure limits |
|---|---|
| dicopper oxide | **ACGIH TLV (United States, 1/2026) [copper fume]**<br>TWA 8 hours: 0.2 mg/m³. Form: Fume. |
| zinc oxide | **ACGIH TLV (United States, 1/2026)**<br>TWA 8 hours: 2 mg/m³. Form: Respirable fraction.<br>STEL 15 minutes: 10 mg/m³. Form: Respirable fraction. |
| rosin | **ACGIH TLV (United States, 1/2026) [resin acids]** Skin sensitizer , Inhalation sensitizer.<br>TWA 8 hours: 0.001 mg/m³ (as total Resin acids). Form: Inhalable fraction. |
| xylene | **Ministry of Labor and Employment (Brazil, 11/2001) [Xylenes (o-, m-, p- isomers)]**<br>TWA 8 hours: 78 ppm.<br>TWA 8 hours: 340 mg/m³. |
| 5-methylhexan-2-one | **ACGIH TLV (United States, 1/2026)**<br>TWA 8 hours: 20 ppm.<br>TWA 8 hours: 93 mg/m³.<br>STEL 15 minutes: 50 ppm.<br>STEL 15 minutes: 234 mg/m³. |
| diiron trioxide | **ACGIH TLV (United States, 1/2026)**<br>TWA 8 hours: 5 mg/m³. Form: Respirable fraction. |
| Talc , not containing asbestiform fibres | **ACGIH TLV (United States, 1/2026)**<br>TWA 8 hours: 2 mg/m³. Form: Respirable fraction. |
| ethylbenzene | **Ministry of Labor and Employment (Brazil, 11/2001)**<br>TWA 8 hours: 78 ppm.<br>TWA 8 hours: 340 mg/m³. |
| copper oxide | **ACGIH TLV (United States, 1/2026) [copper fume]**<br>TWA 8 hours: 0.2 mg/m³. Form: Fume. |
| copper | **ACGIH TLV (United States, 1/2026) [copper dusts and mists]**<br>TWA 8 hours: 1 mg/m³ (as Cu). Form: Dust and mist.<br>**ACGIH TLV (United States, 1/2026) [copper fume]**<br>TWA 8 hours: 0.2 mg/m³. Form: Fume. |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | **ACGIH TLV (United States)**<br>TWA: 3 mg/m³ (Respirable fraction).<br>TWA: 10 mg/m³ (Total dust). |
| lead monoxide | **ACGIH TLV (United States, 1/2026) [Lead and inorganic compounds]**<br>TWA 8 hours: 0.05 mg/m³ (as Pb). |

# 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye protection** : Chemical splash goggles and face shield.

**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** : butyl rubber

**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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**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** : Brownish-red.

**Odor** : Aromatic.

**pH** : Not applicable.

**Melting point** : Not available.

**Boiling point** : >37.78°C (>100°F)

**Flash point** : Closed cup: 30°C (86°F)

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

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

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Relative density** : 1.94

**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 (104°F)): >21 $mm^2/s$ (>21 cSt)

# 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 nitrogen oxides sulfur oxides halogenated compounds metal oxide/ oxides

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| dicopper oxide | LC50 Inhalation Dusts and mists | Rat | 3.34 mg/l | 4 hours |
| | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 500 mg/kg | - |
| zinc oxide | LC50 Inhalation Dusts and mists | Rat | >5700 mg/m³ | 4 hours |
| | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| rosin | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 7600 mg/kg | - |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| 5-methylhexan-2-one | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 8.14 g/kg | - |
| | LD50 Oral | Rat | 5657 mg/kg | - |
| diiron trioxide | LC50 Inhalation Dusts and mists | Rat | >5 mg/l | 4 hours |
| | LD50 Oral | Rat | 10 g/kg | - |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | LC50 Inhalation Dusts and mists | Rat | 0.16 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 3.9 g/kg | - |
| | LD50 Oral | Rat | 567 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapor | Rat | 17.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | - |
| copper oxide | LD50 Oral | Rat | >2000 mg/kg | - |
| copper | LC50 Inhalation Dusts and mists | Rat | >5.11 mg/l | 4 hours |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | LC50 Inhalation Dusts and mists | Rat | >5.08 mg/l | 4 hours |

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

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

**Conclusion/Summary**

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

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

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

### Sensitization

Not available.

**Conclusion/Summary**

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

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

### Mutagenicity

Not available.

# Section 11. Toxicological information

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

## Carcinogenicity

Not available.

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

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| xylene | - | 3 | - |
| diiron trioxide | - | 3 | - |
| Talc , not containing asbestiform fibres | - | 2A | - |
| ethylbenzene | - | 2B | - |

**Carcinogen Classification code:**

**IARC: 1, 2A, 2B, 3, 4**
**NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen**
**OSHA: +**
**Not listed/not regulated: -**

## Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|---|---|---|---|---|---|---|
| 5-methylhexan-2-one | - | - | Equivocal | Rabbit | Inhalation: 1250 ppm | - |

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

## Teratogenicity

Not available.

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

## Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| dicopper oxide | None. | None. | None. |
| zinc oxide | None. | None. | None. |
| rosin | None. | None. | None. |
| xylene | Category 3 | - | Respiratory tract irritation |
| 5-methylhexan-2-one | None. | None. | None. |
| Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene | None. | None. | None. |
| diiron trioxide | None. | None. | None. |
| Talc , not containing asbestiform fibres | Category 3 | - | Respiratory tract irritation |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | Category 3 | - | Respiratory tract irritation |
| ethylbenzene | None. | None. | None. |
| copper oxide | None. | None. | None. |
| copper | None. | None. | None. |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | None. | None. | None. |

# Section 11. Toxicological information

| | | | |
|---|---|---|---|
| Cashew, nutshell liq. | None. | None. | None. |
| lead monoxide | None. | None. | None. |

## Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| dicopper oxide | None. | None. | None. |
| zinc oxide | None. | None. | None. |
| rosin | None. | None. | None. |
| xylene | None. | None. | None. |
| 5-methylhexan-2-one | None. | None. | None. |
| Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene | None. | None. | None. |
| diiron trioxide | None. | None. | None. |
| Talc , not containing asbestiform fibres | None. | None. | None. |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | None. | None. | None. |
| ethylbenzene | Category 2 | - | hearing organs |
| copper oxide | None. | None. | None. |
| copper | None. | None. | None. |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | None. | None. | None. |
| Cashew, nutshell liq. | None. | None. | None. |
| lead monoxide | Category 2 | - | - |

**Target organs** : Contains material which causes damage to the following organs: brain.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

## Aspiration hazard

| Name | Result |
|---|---|
| dicopper oxide | None. |
| zinc oxide | None. |
| rosin | None. |
| xylene | ASPIRATION HAZARD - Category 1 |
| xylene | None. |
| 5-methylhexan-2-one | ASPIRATION HAZARD - Category 2 |
| 5-methylhexan-2-one | None. |
| Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene | None. |
| diiron trioxide | None. |
| Talc , not containing asbestiform fibres | None. |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | None. |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | None. |
| copper oxide | None. |
| copper | None. |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | None. |
| Cashew, nutshell liq. | None. |
| lead monoxide | None. |

# Section 11. Toxicological information

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

## Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : Harmful if inhaled.

**Skin contact** : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion** : Harmful if swallowed.

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

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

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

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

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

**Conclusion/Summary** : There are no data available on the mixture itself. Contains lead. Exposure to lead dust and fumes adversely affects blood and blood forming tissues, kidneys, liver, the central/peripheral nervous systems and male/female reproductive organs. Lead exposure causes adverse developmental effects including brain damage in children and unborn fetuses. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

# Section 11. Toxicological information

## Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

## Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

## Potential chronic health effects

Not available.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

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

**Reproductive toxicity** : Suspected of damaging 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) |
|---|---|---|---|---|---|
| SIGMA ECOFLEET 530 REDBROWN | 1193.7 | 2621.1 | 55783.5 | 50.6 | 2.0 |
| dicopper oxide | 500 | 2500 | Not available | Not available | 3.34 |
| zinc oxide | Not available | 2500 | Not available | Not available | Not available |
| rosin | 7600 | 2500 | Not available | Not available | Not available |
| xylene | 4300 | 1700 | Not available | 11 | 1.5 |
| 5-methylhexan-2-one | 5657 | 8140 | 5000 | 11 | 1.5 |
| Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene | Not available | Not available | Not available | Not available | Not available |
| diiron trioxide | 10000 | Not available | Not available | Not available | Not available |
| Talc , not containing asbestiform fibres | Not available | Not available | Not available | Not available | Not available |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | 567 | 1100 | Not available | Not available | 0.16 |
| ethylbenzene | 3500 | 17800 | Not available | 17.8 | 1.5 |
| copper oxide | 2500 | Not available | Not available | Not available | Not available |
| copper | Not available | Not available | Not available | Not available | Not available |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and | Not available | Not available | Not available | Not available | Not available |

# Section 11. Toxicological information

| | | | | | |
|---|---|---|---|---|---|
| 1,3-phenylenedimethanamine<br>Cashew, nutshell liq. | 500 | 1100 | Not available | Not available | Not available |
| lead monoxide | 500 | Not available | Not available | 11 | 1.5 |

**Other information** : Not available.

# Section 12. Ecological information

## Ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| dicopper oxide | LC50 0.003 mg/l | Fish | 96 hours |
| zinc oxide | Acute EC50 0.17 mg/l | Algae | 72 hours |
| | Acute EC50 0.481 mg/l Fresh water | Daphnia - *Daphnia magna* - Neonate | 48 hours |
| | Chronic NOEC 0.017 mg/l Fresh water | Algae | 72 hours |
| 5-methylhexan-2-one | Acute LC50 159 mg/l | Fish | 96 hours |
| diiron trioxide | Acute EC50 >100 mg/l | Daphnia | 48 hours |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | Acute EC50 267.368 µg/l Marine water | Algae - *Nitzschia pungens* | 96 hours |
| | Acute LC50 0.318 mg/l Marine water | Crustaceans - *Artemia sp.* | 48 hours |
| | Acute LC50 0.0027 mg/l Fresh water | Fish | 96 hours |
| | Chronic NOEC 19.789 µg/l Marine water | Algae - *Nitzschia pungens* | 96 hours |
| | Chronic NOEC 0.00056 mg/l Fresh water | Fish | 97 days |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - *Ceriodaphnia dubia* | - |
| copper | Acute LC50 810 ppb | Fish | 96 hours |
| | Chronic EC10 8.1 µg/l | Daphnia - *Daphnia magna* - Neonate | 21 days |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | Acute LC50 >100 mg/l | Fish | 96 hours |

## Persistence/degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| 5-methylhexan-2-one | OECD 301D | 67 % - Readily - 28 days | - | - |
| ethylbenzene | - | 79 % - Readily - 10 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| xylene | - | - | Readily |
| 5-methylhexan-2-one | - | - | Readily |
| ethylbenzene | - | - | Readily |

## Bioaccumulative potential

# Section 12. Ecological information

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| dicopper oxide | None. | None. | None. |
| zinc oxide | None. | None. | None. |
| rosin | 1.9 to 7.7 | None. | High |
| xylene | 3.12 | 7.4 to 18.5 | Low |
| 5-methylhexan-2-one | 1.88 | None. | Low |
| Propane, 1-(ethenyloxy) -2-methyl-, polymer with chloroethene | None. | None. | None. |
| diiron trioxide | None. | None. | None. |
| Talc , not containing asbestiform fibres | None. | None. | None. |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | None. | None. | None. |
| ethylbenzene | 3.6 | 79.43 | Low |
| copper oxide | None. | None. | None. |
| copper | None. | None. | None. |
| Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine | None. | None. | None. |
| Cashew, nutshell liq. | >4.78 | None. | High |
| lead monoxide | None. | None. | None. |

**Mobility in soil**

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

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

# 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

| | UN | Brazil (ANTT) | IMDG | IATA |
|---|---|---|---|---|
| **UN number** | UN1263 | UN1263 | UN1263 | UN1263 |
| **UN proper shipping name** | PAINT | PAINT | PAINT | PAINT |
| **Transport hazard class(es)** | 3 | 3 | 3 | 3 |
| **Packing group** | III | III | III | III |
| **Environmental hazards** | Yes. The environmentally hazardous substance mark is not required. | Yes. The environmentally hazardous substance mark is not required. | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| **Marine pollutant substances** | Not applicable. | Not applicable. | (dicopper oxide) | Not applicable. |

**Additional information**

**UN** : None identified.

**Brazil** : None identified.

**Risk number** : 30

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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

**Safety, health and environmental regulations specific for the product** : No known specific national and/or regional regulations applicable to this product (including its ingredients).

# Section 16. Other information

**History**

**Date of previous issue** : **2/26/2026**

**Version** : **2.04**

EHS

# Section 16. Other information

**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

**References** : ABNT NBR 14725: 2023 (April 2025)
ANTT - National Land Transportation Agency

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

## Disclaimer

***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.***