## SAFETY DATA SHEET



Date of issue

4 July 2023

Version 4

## Section 1. Product and company identification

Product name : SIGMADUR CLEAR COAT HARDENER

Product code : 246841L.04
Other means of identification : Not available.

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 (inhalation) - Category 4

SKIN IRRITATION - Category 3

RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

AQUATIC HAZARD (ACUTE) - Category 3

**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, upper respiratory tract, skin, central nervous

system (CNS), ears, eye, lens or cornea.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 6.2%

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### Section 2. Hazards identification

### **GHS label elements**

**Hazard pictograms** 







Signal word : Danger

: Mammable liquid and vapor. **Hazard statements** 

Causes mild skin irritation.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation. Suspected of causing cancer. Harmful to aquatic life.

### **Precautionary statements**

**Prevention** 

: Øbtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid release to the environment. Avoid breathing vapor.

Response

: F 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 experiencing respiratory symptoms: Call a POISON CENTER or doctor. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

**Storage** 

: 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.

result in classification

Other hazards which do not : Frolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture Other means of

identification

: Not available.

#### **CAS** number/other identifiers

**CAS** number : Not applicable.

| Ingredient name                                     | %           | CAS number |
|---|-------------|------------|
| Fexamethylene diisocyanate, oligomers (Biuret type) | 60 - 100    | 28182-81-2 |
| 2-methoxy-1-methylethyl acetate                     | 12.5 - <15  | 108-65-6   |
| xylene  | 5 - <7      | 1330-20-7  |
| ethylbenzene  | 5 - <7      | 100-41-4   |
| hexamethylene-di-isocyanate                         | 0.2 - < 0.5 | 822-06-0   |

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## Section 3. Composition/information on ingredients

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.

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

Notes to physician Specific treatments

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

: The exposed person may need to be kept under medical surveillance for 48 hours.

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.

#### Potential acute health effects

Eye contact Inhalation

: No known significant effects or critical hazards.

: Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

reaction.

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

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** 

: Do not use water jet.

media

media

Specific hazards arising from the chemical

: Mammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

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## Section 5. Fire-fighting measures

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides

nitrogen oxides

Cyanate and isocyanate. hydrogen cyanide

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 or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

### 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 noncombustible, 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.

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### Section 6. Accidental release measures

**Special provisions** 

: 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). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

## 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 or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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

: Do not store above the following temperature: 50°C (122°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. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO<sub>2</sub> will be formed, which, in closed containers, could result in pressurization.

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## Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

| Ingredient name             | Exposure limits   |
|-----------------------------|---|
| <b>x</b> ylene              | Ministry of Labor and Employment (Brazil, 11/2001). [Xylenes (o-, m-, p- isomers)] TWA: 340 mg/m³ 8 hours. TWA: 78 ppm 8 hours. |
| ethylbenzene                | Ministry of Labor and Employment (Brazil, 11/2001).   |
|                             | TWA: 340 mg/m³ 8 hours. TWA: 78 ppm 8 hours.  |
| hexamethylene-di-isocyanate | ACGIH TLV (United States, 1/2022). TWA: 0.03 mg/m³ 8 hours. TWA: 0.005 ppm 8 hours.   |

## 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 Skin protection Hand protection

: Safety glasses with side shields.

: 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

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## Section 8. Exposure controls/personal protection

: Personal protective equipment for the body should be selected based on the task **Body protection** 

> 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.

: Use an air-fed respirator unless a site-specific assessment determines that an air-**Respiratory protection** 

fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. 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.

## Section 9. Physical and chemical properties

**Appearance** 

**Physical state** : Liquid.

Color : Not available. : Not available. Odor pН : Not applicable. **Melting point** : Not available. **Boiling point** 

: >37.78°C (>100°F)

: Closed cup: 40.8°C (105.4°F) Flash point

**Evaporation rate** : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density Not available.

**Relative density** 1.07

Media **Result** 

Solubility(ies) cold water Not soluble

Partition coefficient: n-

octanol/water

: Not applicable.

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

**Viscosity** : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

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### 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** : In a fire, hazardous decomposition products may be produced.

Incompatible materials : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: Cyanate and isocyanate. carbon oxides nitrogen oxides hydrogen cyanide

## Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

| Product/ingredient name                                   | Result                          | Species | Dose         | <b>Exposure</b> |
|---|---------------------------------|---------|--------------|-----------------|
| Mexamethylene<br>diisocyanate, oligomers<br>(Biuret type) | LD50 Dermal                     | Rat     | >15800 mg/kg | -               |
| ,   | LD50 Oral                       | Rat     | >5000 mg/kg  | -               |
| 2-methoxy-1-methylethyl<br>acetate                        | LC50 Inhalation Vapor           | Rat     | 30 mg/l      | 4 hours         |
|   | LD50 Dermal                     | Rabbit  | >5 g/kg      | -               |
|   | LD50 Oral                       | Rat     | 6190 mg/kg   | -               |
| xylene  | LD50 Dermal                     | Rabbit  | 1.7 g/kg     | -               |
| •   | LD50 Oral                       | Rat     | 4.3 g/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     | -               |
| hexamethylene-di-<br>isocyanate                           | LC50 Inhalation Dusts and mists | Rat     | 124 mg/m³    | 4 hours         |
| -   | LC50 Inhalation Vapor           | Rat     | 151 mg/m³    | 4 hours         |
|   | LD50 Dermal                     | Rabbit  | 0.57 g/kg    | -               |
|   | LD50 Oral                       | Rat     | 0.71 g/kg    | -               |

## Conclusion/Summary Irritation/Corrosion

: There are no data available on the mixture itself.

| Product/ingredient name | Result                   | Species | Score | Exposure           | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| kylene                  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500<br>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** 

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## Section 11. Toxicological information

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.

**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 |
|-------------------------|------|------|-----|
| <b>x</b> ylene          | -    | 3    | -   |
| 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

Not available.

**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                |
|---|------------|-------------------|------------------------------|
| Hexamethylene diisocyanate, oligomers (Biuret type) | Category 3 | -                 | Respiratory tract irritation |
| 2-methoxy-1-methylethyl acetate                     | Category 3 | -                 | Narcotic effects             |
| xylene  | Category 3 | -                 | Respiratory tract irritation |
| hexamethylene-di-isocyanate                         | Category 3 | -                 | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

| Name                 |            | Route of exposure | Target organs  |
|----------------------|------------|-------------------|----------------|
| <b>e</b> thylbenzene | Category 2 | -                 | hearing organs |

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## Section 11. Toxicological information

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, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

#### **Aspiration hazard**

| Name | Result  |
|------|---|
|      | ASPIRATION HAZARD - Category 1 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 : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

**Skin contact**: Causes mild skin irritation. Defatting to the skin. May cause an allergic skin

reaction.

Ingestion : No known significant effects or critical hazards.

### 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:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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

**Conclusion/Summary** 

rhere are no data available on the mixture itself. Skin contact to isocyanate monomer may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Repeated exposure may lead to permanent respiratory disability. 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

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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.

**Short term exposure** 

**Potential immediate** 

effects

: There are no data available on the mixture itself.

Potential delayed effects

cts : 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: Frolonged 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** : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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

**Reproductive toxicity**: No known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

| Product/ingredient name                             | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapors)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|---|------------------|-------------------|--------------------------------|----------------------------------|--|
| MGMADUR CLEAR COAT HARDENER                         | 31013.0          | 27208.7           | N/A                            | 13.0                             | 1.7  |
| Hexamethylene diisocyanate, oligomers (Biuret type) | N/A              | N/A               | N/A                            | 11                               | 1.5  |
| 2-methoxy-1-methylethyl acetate                     | 6190             | N/A               | N/A                            | 30                               | N/A  |
| xylene  | 4300             | 1700              | N/A                            | 11                               | 1.5  |
| ethylbenzene  | 3500             | 17800             | N/A                            | 17.8                             | 1.5  |
| hexamethylene-di-isocyanate                         | 710              | 570               | N/A                            | 0.151                            | 0.124  |

Other information : Not available.

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## **Section 12. Ecological information**

### **Ecotoxicity**

| Product/ingredient name                             | Result  | Species  | Exposure             |
|---|---|--|----------------------|
| ✓examethylene diisocyanate, oligomers (Biuret type) | Acute EC50 >1000 mg/l   | Algae - scenedesmus subspicatus  | 72 hours             |
|   | Acute EC50 >100 mg/l<br>Acute LC50 >100 mg/l                    | Daphnia - <i>daphnia magna</i><br>Fish - <i>Danio rerio (zebra fish)</i> | 48 hours<br>96 hours |
| 2-methoxy-1-methylethyl acetate                     | Acute LC50 134 mg/l Fresh water                                 | Fish - Oncorhynchus mykiss   | 96 hours             |
| ethylbenzene  | Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water | Daphnia<br>Daphnia - <i>Ceriodaphnia dubia</i>                           | 48 hours<br>-        |

### Persistence/degradability

| Product/ingredient name         | Test | Result                   | Dose | Inoculum |
|---------------------------------|------|--------------------------|------|----------|
| 2-methoxy-1-methylethyl acetate | -    | 83 % - Readily - 28 days | -    | -        |
| ethylbenzene                    | -    | 79 % - Readily - 10 days | -    | -        |

| Product/ingredient name                         | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| Fexamethylene diisocyanate,                     | -                 | -          | Not readily      |
| oligomers (Biuret type) 2-methoxy-1-methylethyl | -                 | -          | Readily          |
| acetate<br>xylene                               | -                 | -          | Readily          |
| ethylbenzene                                    | -                 | -          | Readily          |

### **Bioaccumulative potential**

| Product/ingredient name                             | LogPow | BCF         | Potential |
|---|--------|-------------|-----------|
| ✓examethylene diisocyanate, oligomers (Biuret type) | 5.54   | 3.2         | Low       |
| 2-methoxy-1-methylethyl acetate                     | 1.2    | -           | Low       |
| xylene  | 3.12   | 7.4 to 18.5 | Low       |
| ethylbenzene  | 3.6    | 79.43       | Low       |
| hexamethylene-di-isocyanate                         | 0.02   | -           | Low       |

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

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

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## 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 nonrecyclable 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

|                             | Brazil (ANTT)          | IMDG                   | IATA                   |
|-----------------------------|------------------------|------------------------|------------------------|
| UN number                   | UN1263                 | UN1263                 | UN1263                 |
| UN proper shipping name     | PAINT RELATED MATERIAL | PAINT RELATED MATERIAL | PAINT RELATED MATERIAL |
| Transport hazard class(es)  | 3                      | 3                      | 3                      |
| Packing group               | III                    | III                    | III                    |
| Environmental hazards       | No.                    | No.                    | No.                    |
| Marine pollutant substances | Not applicable.        | Not applicable.        | Not applicable.        |

### **Additional information**

**Brazil** : None identified.

Risk number : 30

**IMDG** : None identified. **IATA** : None identified.

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: Not applicable.

to IMO instruments

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## 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 : 12/21/2019

Version : 4
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

References : ABNT NBR 14725-4: 2014

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.

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