SAFETY DATA SHEET



Date of issue Version 1 3 August 2022

· or or or or

Section 1. Product and company identification

Product name : SIGMATHERM 540

Product code : 00445433
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 (dermal) - Category 5

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Target organs : Contains material which causes damage to the following organs: brain, skin, eye,

lens or cornea.

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, heart, upper respiratory tract, central nervous system

(CNS), ears.

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Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 39.8%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 71.3%

GHS label elements

Hazard pictograms









Signal word : Danger

Hazard statements : Flammable liquid and vapor.

May be harmful in contact with skin.

Causes skin irritation.

Causes serious eye damage. May cause respiratory irritation.

May cause cancer.

Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Obtain special instructions before use. 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. 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. Wash thoroughly after handling.

Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. 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

: 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.

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

result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable.

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Section 3. Composition/information on ingredients

| Ingredient name | % | CAS number |
|---|-------------|------------|
| xylene | 20 - <30 | 1330-20-7 |
| Aluminium powder (stabilized) | 15 - <20 | 7429-90-5 |
| Wollastonite | 12.5 - <15 | 13983-17-0 |
| Solvent naphtha (petroleum), heavy arom. | 7 - <10 | 64742-94-5 |
| 1-methoxy-2-propanol | 7 - <10 | 107-98-2 |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 5 - <7 | 2530-83-8 |
| ethylbenzene | 3 - <5 | 100-41-4 |
| 1-Butanol, titanium(4+) salt (4:1), homopolymer | 1 - <2 | 9022-96-2 |
| toluene | 0.2 - < 0.5 | 108-88-3 |
| crystalline silica, respirable powder (<10 microns) | 0.1 - < 0.2 | 14808-60-7 |

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.

: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and Skin contact

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 : Treat symptomatically. Contact poison treatment specialist immediately if large **Specific treatments**

quantities have been ingested or inhaled.

No specific treatment.

: No action shall be taken involving any personal risk or without suitable training. If it **Protection of first-aiders**

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

: Causes serious eye damage. **Eye contact** Inhalation : May cause respiratory irritation.

Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

Ingestion : No known significant effects or critical hazards.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, 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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon oxides

metal oxide/oxides

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 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.

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Section 6. Accidental release measures

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.

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. 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.

including any incompatibilities

Conditions for safe storage, : 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 |
|--------------------------------------|---|
| xylene Aluminium powder (stabilized) | Ministry of Labor and Employment (Brazil, 11/2001). [Xylenes (o-, m-, p- isomers)] TWA: 340 mg/m³ 8 hours. TWA: 78 ppm 8 hours. ACGIH TLV (United States, 1/2021). [Aluminum, metal and insoluble |
| Wollastonite | compounds] TWA: 1 mg/m³ 8 hours. Form: Respirable fraction ACGIH TLV (United States, 1/2021). |

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Section 8. Exposure controls/personal protection

fraction

1-methoxy-2-propanol ACGIH TLV (United States, 1/2021).

STEL: 369 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 184 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

TWA: 1 mg/m³ 8 hours. Form: Inhalable

ethylbenzene Ministry of Labor and Employment (Brazil,

11/2001).

TWA: 340 mg/m³ 8 hours. TWA: 78 ppm 8 hours.

Ministry of Labor and Employment (Brazil, 11/2001). Absorbed through skin.

TWA: 290 mg/m³ 8 hours. TWA: 78 ppm 8 hours.

crystalline silica, respirable powder (<10 microns) ACGIH TLV (United States, 1/2021). [Silica,

crystalline]

TWA: 0.025 mg/m³ 8 hours. Form:

Respirable

Recommended monitoring procedures

toluene

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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
Skin protection
Hand protection

: Chemical splash goggles and face shield.

: 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.

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Section 8. Exposure controls/personal protection

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

Not recommended: nitrile rubber

Recommended: polyvinyl alcohol (PVA), butyl rubber, Viton®

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.

: Appropriate footwear and any additional skin protection measures should be Other skin protection

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

: Respirator selection must be based on known or anticipated exposure levels, the Respiratory protection

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 : Aromatic.

Ha Not applicable. **Melting point** Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 35°C (95°F)

Evaporation rate Not available. Flammability (solid, gas) Not available. : Not available.

Lower and upper explosive

(flammable) limits

Vapor pressure : Not available. Vapor density : Not available.

Relative density : 1.18

Solubility : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : Not available.

: Not available. **Decomposition temperature**

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

: 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 | Species | Dose | Exposure |
|---|---------------------------------|---------|-------------------------|----------|
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| Aluminium powder (stabilized) | LC50 Inhalation Dusts and mists | Rat | >5 mg/l | 4 hours |
| , | LD50 Oral | Rat | >15900 mg/kg | - |
| Solvent naphtha (petroleum), heavy arom. | LC50 Inhalation Dusts and mists | Rat | >5.2 mg/l | 4 hours |
| , | LD50 Oral | Rat | >5 g/kg | - |
| 1-methoxy-2-propanol | LC50 Inhalation Vapor | Rat | >7000 ppm | 6 hours |
| | LD50 Dermal | Rabbit | 13 g/kg | - |
| | LD50 Oral | Rat | 5.2 g/kg | - |
| [3-(2,3-epoxypropoxy)propyl] trimethoxysilane | LC50 Inhalation Dusts and mists | Rat | >5300 mg/m ³ | 4 hours |
| , | LD50 Dermal | Rabbit | 4.3 g/kg | - |
| | LD50 Oral | Rat | 7.01 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 | - |
| toluene | LC50 Inhalation Vapor | Rat | 49 g/m³ | 4 hours |
| | LD50 Dermal | Rabbit | 8.39 g/kg | - |
| | LD50 Oral | Rat | 5580 mg/kg | - |

Conclusion/Summary Irritation/Corrosion

: There are no data available on the mixture itself.

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|--------------------------|---------|-------|--------------------|-------------|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| [3-(2,3-epoxypropoxy)propyl] trimethoxysilane | Eyes - Cornea opacity | Rabbit | 11.8 | 1 minutes | 24 hours |

Conclusion/Summary

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Section 11. Toxicological information

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.

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 | - |
| Wollastonite | - | 3 | - |
| ethylbenzene | - | 2B | - |
| toluene | - | 3 | - |
| crystalline silica, respirable powder (<10 microns) | - | 1 | Known to be a human carcinogen. |

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 |
|---|------------|-------------------|------------------------------|
| xylene | Category 3 | - | Respiratory tract irritation |
| Solvent naphtha (petroleum), heavy arom. | Category 3 | - | Narcotic effects |
| 1-methoxy-2-propanol | Category 3 | - | Narcotic effects |
| 1-Butanol, titanium(4+) salt (4:1), homopolymer | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| toluene | Category 3 | - | Narcotic effects |

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Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

| Name | | Route of exposure | Target organs |
|---|------------|-------------------|----------------|
| ethylbenzene | Category 2 | - | hearing organs |
| toluene | Category 2 | - | - |
| crystalline silica, respirable powder (<10 microns) | Category 1 | inhalation | - |

Target organs

: Contains material which causes damage to the following organs: brain, skin, eye,

lens or cornea.

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, heart, upper respiratory tract, central nervous system (CNS), ears.

Aspiration hazard

| Name | Result |
|---|---|
| xylene Solvent naphtha (petroleum), heavy arom. ethylbenzene toluene | ASPIRATION HAZARD - Category 1 |

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage. **Inhalation** : May cause respiratory irritation.

Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

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 watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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

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Section 11. Toxicological information

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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. 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.

Short term exposure

Potential immediate

effects

: There are no data available on the mixture itself.

Potential delayed effects

Long term exposure

Potential immediate

effects

: There are no data available on the mixture itself.

: 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.

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

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Section 11. Toxicological information

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|------------------|-------------------|--------------------------------|----------------------------------|--|
| SIGMATHERM 540 | 9731 | 4403.9 | N/A | 40.1 | 5.1 |
| xylene | 4300 | 1700 | N/A | 11 | 1.5 |
| 1-methoxy-2-propanol | 5200 | 13000 | N/A | N/A | N/A |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 7010 | 4300 | N/A | N/A | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | 1.5 |
| 1-Butanol, titanium(4+) salt (4:1), homopolymer | 500 | N/A | N/A | N/A | N/A |
| toluene | 5580 | 8390 | N/A | 49 | N/A |

Other information : Not available.

Section 12. Ecological information

Ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|----------------------|
| Solvent naphtha (petroleum), heavy arom. | NOEL 0.48 mg/l Fresh water | Daphnia | 21 days |
| 1-methoxy-2-propanol | Acute LC50 23300 mg/l Acute LC50 >4500 mg/l Fresh water | Daphnia Fish | 48 hours 96 hours |
| [3-(2,3-epoxypropoxy)propyl] trimethoxysilane | | Daphnia | 48 hours |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water | Daphnia Daphnia - Ceriodaphnia dubia | 48 hours |

Persistence/degradability

| Product/ingredient name | Test | Result | | Dose | | Inoculum |
|-----------------------------------|-------------------|--------------------------|------------|------|-------------------------------|----------|
| ethylbenzene | - | 79 % - Readily - 10 days | | - | | - |
| Product/ingredient name | Aquatic half-life | • | Photolysis | | Biodegradability | |
| xylene ethylbenzene toluene | - - - | | - | | Readily Readily Readily | 1 |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|------------------------------|------------|-------------|-----------|
| xylene | 3.12 | 7.4 to 18.5 | low |
| Solvent naphtha (petroleum), | 2.8 to 6.5 | - | high |
| heavy arom. | | | |
| 1-methoxy-2-propanol | <1 | - | low |
| ethylbenzene | 3.6 | 79.43 | low |
| toluene | 2.73 | 8.32 | low |

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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Section 12. Ecological information

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 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

| | 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 | No. | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. | Not applicable. |

Additional information

UN : None identified. **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

Product name SIGMATHERM 540

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

: No previous validation

Version

: 1

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

: ABNT NBR 14725-4: 2014 References

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 quarantee 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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