



Date of issue 18 December 2018
Version 4

Section 1. Product and company identification

Product name : SIGMACOVER 300 BASE BLACK
Product code : 00138917
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)

e-mail address of person responsible for this SDS : fispq@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 5
 ACUTE TOXICITY (dermal) - Category 5
 ACUTE TOXICITY (inhalation) - Category 4
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 GERM CELL MUTAGENICITY - Category 1B
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION (Fertility) - Category 1B
 TOXIC TO REPRODUCTION (Unborn child) - Category 1B
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 1
 AQUATIC HAZARD (ACUTE) - Category 1
 AQUATIC HAZARD (LONG-TERM) - Category 1

Section 2. Hazards identification

Target organs : Contains material which causes damage to the following organs: liver, spleen, brain, bone marrow.
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, heart, bladder, cardiovascular system, upper respiratory tract, immune system, skin, central nervous system (CNS), ears, eye, lens or cornea.

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 57% (Oral), 57% (Dermal), 75.6% (Inhalation)

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 70.8%

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: **F**lammable liquid and vapor.
Harmful if inhaled.
May be harmful if swallowed or in contact with skin.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
May cause respiratory irritation.
Causes damage to organs through prolonged or repeated exposure. (hearing organs)
Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Section 2. Hazards identification

- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- 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** : Not available.

CAS number/other identifiers

- CAS number** : Not applicable.

Ingredient name	%	CAS number
crystalline silica, respirable powder (>10 microns)	20 - <30	14808-60-7
xylene	12.5 - <15	1330-20-7
Pitch, coal tar, high-temp.	10 - <12.5	65996-93-2
Talc , not containing asbestiform fibres	7 - <10	14807-96-6
crystalline silica, respirable powder (<10 microns)	7 - <10	14808-60-7
Epoxy resin (MW ≤ 700)	5 - <7	25068-38-6
Epoxy resin (700<MW<1100)	3 - <5	25068-38-6
1-methoxy-2-propanol	1 - <2	107-98-2
ethylbenzene	1 - <2	100-41-4
Creosote oil, acenaphthene fraction	1 - <2	90640-84-9
Distillates (coal tar), heavy oils	0.5 - <1	90640-86-1
4-nonylphenol, branched	0.5 - <1	84852-15-3
phenanthrene	0.5 - <1	85-01-8
pyrene	0.5 - <1	129-00-0
naphthalene	0.5 - <1	91-20-3
benz[e]acephenanthrylene	0.2 - <0.5	205-99-2
benzo[k]fluoranthene	0.2 - <0.5	207-08-9
benz[a]anthracene	0.2 - <0.5	56-55-3
chrysene	0.2 - <0.5	218-01-9
benzo[a]pyrene	0.1 - <0.2	50-32-8
benzo[e]pyrene	0.1 - <0.2	192-97-2
biphenyl	0.1 - <0.2	92-52-4
dibenz[a,h]anthracene	0 - <0.1	53-70-3
Phenol, 2-nonyl-, branched	0 - <0.1	91672-41-2

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** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : May be harmful if swallowed.

See toxicological information (Section 11)

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 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
halogenated compounds
metal oxide/oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Section 7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. 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 get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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
<input checked="" type="checkbox"/> crystalline silica, respirable powder (>10 microns)	ACGIH TLV (United States, 3/2018). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction
xylene	Minsitry of Labor and Employment (Brazil, 11/2001). TWA: 340 mg/m ³ 8 hours. TWA: 78 ppm 8 hours.
Pitch, coal tar, high-temp.	ACGIH TLV (United States, 3/2018). TWA: 0.2 mg/m ³ , (as benzene soluble aerosol) 8 hours.
Talc , not containing asbestiform fibres	ACGIH TLV (United States, 3/2018). TWA: 2 mg/m ³ 8 hours. Form: Respirable
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 3/2018). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable
1-methoxy-2-propanol	ACGIH TLV (United States, 3/2018). STEL: 369 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes.

Section 8. Exposure controls/personal protection

ethylbenzene

naphthalene

biphenyl

TWA: 184 mg/m³ 8 hours.

TWA: 50 ppm 8 hours.

Minsitry of Labor and Employment (Brazil, 11/2001).

TWA: 340 mg/m³ 8 hours.

TWA: 78 ppm 8 hours.

ACGIH TLV (United States, 3/2018).

Absorbed through skin.

TWA: 52 mg/m³ 8 hours.

TWA: 10 ppm 8 hours.

ACGIH TLV (United States, 3/2018).

TWA: 0.2 ppm 8 hours.

TWA: 1.3 mg/m³ 8 hours.

Recommended monitoring procedures : 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. 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.

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

Section 8. Exposure controls/personal protection

- 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** : Not available.
- Odor** : Aromatic. [Strong]
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 31.2°C (88.2°F)
- Evaporation rate** : Not available.
- Material supports combustion.** : Yes.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.55
- Solubility** : Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 270°C (518°F)
- Decomposition temperature** : Not available.
- Viscosity** : 60 - 100 s (ISO 6mm)

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** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

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	-
Pitch, coal tar, high-temp.	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3300 mg/kg	-
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 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	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	0.58 g/kg	-
	LD50 Oral	Rat	1.8 g/kg	-
phenanthrene	LD50 Oral	Rat	1.8 g/kg	-
	LC50 Inhalation Dusts and mists	Rat	170 mg/m ³	4 hours
	LD50 Oral	Rat	2.7 g/kg	-
naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
	LD50 Dermal	Rabbit	>5010 mg/kg	-
biphenyl	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	2140 mg/kg	-

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	-
Epoxy resin (MW ≤ 700)	Skin - Mild irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	-	-

Conclusion/Summary

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

Section 11. Toxicological information

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

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

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Epoxy resin (MW ≤ 700)	skin	Mouse	Sensitizing

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
crystalline silica, respirable powder (>10 microns)	-	1	Known to be a human carcinogen.
xylene	-	3	-
Pitch, coal tar, high-temp.	-	1	-
crystalline silica, respirable powder (<10 microns)	-	1	Known to be a human carcinogen.
ethylbenzene	-	2B	-
naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.
benz[e]acephenanthrylene	+	2B	Reasonably anticipated to be a human carcinogen.
benzo[k]fluoranthene	+	2B	Reasonably anticipated to be a human carcinogen.
benz[a]anthracene	+	2B	Reasonably anticipated to be a human carcinogen.
chrysene	-	2B	-
benzo[a]pyrene	-	1	Reasonably anticipated to be a human carcinogen.
benzo[e]pyrene	-	3	-

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)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	Not applicable.	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	Not applicable.	Narcotic effects
biphenyl	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
crystalline silica, respirable powder (<10 microns)	Category 1	Inhalation	Not determined
ethylbenzene	Category 2	Not determined	hearing organs
phenanthrene	Category 2	Not determined	Not determined
pyrene	Category 2	Not determined	Not determined
naphthalene	Category 2	Not determined	Not determined
chrysene	Category 2	Not determined	Not determined
benzo[a]pyrene	Category 2	Not determined	Not determined
biphenyl	Category 2	Not determined	Not determined

Target organs

: Contains material which causes damage to the following organs: liver, spleen, brain, bone marrow.

Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, heart, bladder, cardiovascular system, upper respiratory tract, immune system, skin, central nervous system (CNS), ears, eye, lens or cornea.

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact

: Causes serious eye irritation.

Inhalation

: Harmful if inhaled. May cause respiratory irritation.

Skin contact

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

Ingestion

: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

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

Section 11. Toxicological information

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:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

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

Conclusion/Summary : There are no data available on the mixture itself. 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 : 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 : Causes damage to organs through prolonged or repeated exposure. 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.

Section 11. Toxicological information

Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: May cause genetic defects.
Teratogenicity	: May damage the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4605.6 mg/kg
Dermal	2858.7 mg/kg
Inhalation (gases)	7076.7 ppm
Inhalation (vapors)	18.05 mg/l
Inhalation (dusts and mists)	2.359 mg/l

Other information

Sanding and grinding dusts may be harmful if inhaled. 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. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Section 12. Ecological information

Ecotoxicity

Product/ingredient name	Result	Species	Exposure
Epoxy resin (MW ≤ 700) 1-methoxy-2-propanol	Chronic NOEC 0.3 mg/l Acute LC50 23300 mg/l	Daphnia Daphnia	21 days 48 hours
ethylbenzene	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
Phenol, 2-nonyl-, branched	Acute LC50 150 to 200 mg/l Fresh water Acute LC50 0.017 mg/l	Fish - Lepomis macrochirus - Young of the year Fish - Pleuronectes americanus	96 hours 96 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700)	OECD 301F	5 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene	-	-	Readily
Epoxy resin (MW ≤ 700)	-	-	Not readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.16	7.4 to 18.5	low
Pitch, coal tar, high-temp.	6.04	-	high
Epoxy resin (MW ≤ 700)	3	31	low
ethylbenzene	3.15	79.43	low
4-nonylphenol, branched	-	251.19	low
phenanthrene	4.46	2511.89	high
pyrene	4.88	1513.56	high
naphthalene	3.3	85.11	low
benz[e]acephenanthrylene	5.78	-	high
benzo[k]fluoranthene	6.11	-	high
benz[a]anthracene	5.76	257.04	low
chrysene	5.81	-	high
benzo[a]pyrene	6.13	-	high
benzo[e]pyrene	6.44	-	high
biphenyl	4.01	436.52	low
dibenz[a,h]anthracene	6.75	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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

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.	(Pitch, coal tar, high-temp., Epoxy resin (MW ≤ 700))	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.

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 : 5/8/2018

Version : 4

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

Section 16. Other information

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

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.