# SAFETY DATA SHEET



Date of issue/Date of revision 18 May 2021

**Version 4** 

## **Section 1. Identification**

Product name : SIGMACOVER 410 Y / ME HARDENER

Product code : 00427526

Other means of : Not available.

identification

Product type : Liquid.

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

Product use : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.

One PPG Place Pittsburgh, PA 15272 : (412) 434-4515 (U.S.)

**Emergency telephone** 

number

(412) 434-4515 (U.S.) (514) 645-1320 (Canada)

SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)

**Technical Phone Number**: 888-977-4762

## Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 32.5%

(oral), 32.5% (dermal), 58.5% (inhalation)

**GHS label elements** 

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## Section 2. Hazards identification

**Hazard pictograms** 









Signal word

**Hazard statements** 

: Danger

: Flammable liquid and vapor.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation. Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure. (hearing organs)

Precautionary statements

**Prevention** 

: Detain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from 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. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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 locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Disposal** 

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

Supplemental label elements

: Do not taste or swallow. 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.

Hazards not otherwise classified

: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

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Product name SIGMACOVER 410 Y / ME HARDENER

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : SIGMACOVER 410 Y / ME HARDENER

Ingredient name	%	CAS number
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	≥20 - ≤50	68082-29-1
fatty acids and triethylenetetramine		
xylene	≥20 - ≤24	1330-20-7
4-nonylphenol, branched	≥10 - ≤19	84852-15-3
2-methylpropan-1-ol	≥10 - ≤12	78-83-1
2,4,6-tris(dimethylaminomethyl)phenol	≥1.0 - ≤5.7	90-72-2
ethylbenzene	≥1.0 - ≤4.5	100-41-4
3,6-diazaoctanethylenediamin	≤1.3	112-24-3
Phenol, 2-nonyl-, branched	<1.0	91672-41-2
toluene	<1.0	108-88-3

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

## **Description of necessary first aid measures**

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running water for

at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

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

or use recognized skin cleanser. Do NOT use solvents or thinners.

**Ingestion**: If swallowed, seek medical advice immediately and show this container or label. Keep

person warm and at rest. Do NOT induce vomiting.

## Most important symptoms/effects, acute and delayed

#### Potential acute health effects

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

**Inhalation** : Harmful if inhaled. May cause respiratory irritation.

**Skin contact**: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

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### Product name SIGMACOVER 410 Y / ME HARDENER

## Section 4. First aid measures

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

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

couahina

reduced fetal weight increase in fetal deaths skeletal malformations

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

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

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

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

**Specific treatments**: No specific treatment.

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

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

## See toxicological information (Section 11)

# Section 5. Fire-fighting measures

## **Extinguishing media**

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

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## Section 5. Fire-fighting measures

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides nitrogen 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).

## 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.

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# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

**Special precautions** 

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: 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. See also Section 8 for additional information on hygiene measures.

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.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits			
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall- oil fatty acids and triethylenetetramine	None.			
xylene	ACGIH TLV (United States, 3/2020).			
	STEL: 651 mg/m <sup>3</sup> 15 minutes.			
	STEL: 150 ppm 15 minutes.			
	TWA: 434 mg/m³ 8 hours.			
	TWA: 100 ppm 8 hours.			
	OSHA PEL (United States, 5/2018).			
	TWA: 435 mg/m <sup>3</sup> 8 hours.			
	TWA: 100 ppm 8 hours.			
4-nonylphenol, branched	None.			
2-methylpropan-1-ol	ACGIH TLV (United States, 3/2020).			
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2,4,6-tris(dimethylaminomethyl)phenol

3,6-diazaoctanethylenediamin

Phenol, 2-nonyl-, branched

ethylbenzene

toluene

# Section 8. Exposure controls/personal protection

TWA: 152 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 300 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

None.

ACGIH TLV (United States, 3/2020).

TWA: 20 ppm 8 hours.

OSHA PEL (United States, 5/2018).

TWA: 435 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

IPEL (-). Absorbed through skin.

TWA: 1 ppm

None.

OSHA PEL Z2 (United States, 2/2013).

AMP: 500 ppm 10 minutes.

CEIL: 300 ppm

TWA: 200 ppm 8 hours.

ACGIH TLV (United States, 3/2020).

TWA: 20 ppm 8 hours.

#### Key to abbreviations

= Acceptable Maximum Peak S = Potential skin absorption ACGIH = American Conference of Governmental Industrial Hygienists. SR = Respiratory sensitization С SS = Skin sensitization

F STEL = Short term Exposure limit values **IPEL** = Total dust TD

= Internal Permissible Exposure Limit OSHA = Occupational Safety and Health Administration. TLV = Threshold Limit Value

= Time Weighted Average R = Respirable TWA = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring: 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** 

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# Section 8. Exposure controls/personal protection

**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/face protection** 

: Chemical splash goggles and face shield.

Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check

during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the

protection time of the gloves cannot be accurately estimated.

Gloves butyl rubber

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

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 antistatic 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.

: 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. The respiratory protection shall be in accordance to 29 CFR 1910.134.

# Section 9. Physical and chemical properties

**Appearance** 

**Physical state** : Liquid.

Color : Not available.

Odor : Amine-like. [Strong]

**Odor threshold**  Not available. рH : Not applicable.

**Melting point** : Not available.

: >37.78°C (>100°F) **Boiling point** 

**Flash point** : Closed cup: 27°C (80.6°F)

**Auto-ignition temperature** : Not available. **Decomposition temperature**: Not available. Flammability (solid, gas) : Not available. : Not available. Lower and upper explosive

(flammable) limits

**Evaporation rate** : Not available.

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## Product name SIGMACOVER 410 Y / ME HARDENER

## Section 9. Physical and chemical properties

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

Relative density : 0.91 Density ( lbs / gal ) : 7.59

**Solubility** : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not applicable.

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

**Volatility** : 43% (v/v), 40.081% (w/w)

**% Solid. (w/w)** : 59.919

# 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.

Refer to protective measures listed in sections 7 and 8.

**Incompatible materials**: Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition

products

: Depending on conditions, decomposition products may include the following materials:

carbon oxides nitrogen oxides

# **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	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl)phenol				
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-

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# **Section 11. Toxicological information**

	LD50 Oral	Rat	3.5 g/kg	-	
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-	
	LD50 Oral	Rat	1716 mg/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** 

: There are no data available on the mixture itself.

## **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Skin - Irritant	Human	-	-	-
_	Eyes - Severe irritant	Rabbit	-	-	-
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
4-nonylphenol, branched	Skin - Erythema/Eschar	Rabbit	4	-	-
2,4,6-tris (dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

## **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**

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitizing
2,4,6-tris (dimethylaminomethyl)phenol	skin	Guinea pig	Sensitizing
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitizing

## **Conclusion/Summary**

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

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

**Mutagenicity** 

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

**Carcinogenicity** 

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

**Classification** 

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# **Section 11. Toxicological information**

Product/ingredient name	OSHA	IARC	NTP
xylene	-	3	-
ethylbenzene	-	2B	-
toluene	-	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

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

**Teratogenicity** 

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

Specific target organ toxicity (single exposure)

Name	3 3 3	Route of exposure	Target organs
xylene	Category 3		Respiratory tract irritation
2-methylpropan-1-ol	Category 3		Respiratory tract irritation
toluene	Category 3 Category 3		Narcotic effects Narcotic effects

## Specific target organ toxicity (repeated exposure)

Name	3 3 3	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2	-	-

**Target organs** 

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

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

#### **Aspiration hazard**

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

#### Information on the likely routes of exposure

## Potential acute health effects

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

Inhalation : Harmful if inhaled. May cause respiratory irritation.

**Skin contact**: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

#### Over-exposure signs/symptoms

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### Product name SIGMACOVER 410 Y / ME HARDENER

# **Section 11. Toxicological information**

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

> pain watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

couahina

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

**Conclusion/Summary** 

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

: There are no data available on the mixture itself.

effects

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

General : May cause 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.

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## **Product name SIGMACOVER 410 Y / ME HARDENER**

# **Section 11. Toxicological information**

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 : Suspected of damaging fertility or the unborn child.

## **Numerical measures of toxicity**

## **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
SIGMACOVER 410 Y / ME HARDENER	2184.8	2063	N/A	17.6	2.3
xylene	4300	1700	N/A	11	1.5
4-nonylphenol, branched	1300	2140	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A
Phenol, 2-nonyl-, branched	500	N/A	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A

# **Section 12. Ecological information**

## **Toxicity**

Product/ingredient name	Result	Species	Exposure
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and	EC10 1.78 mg/l	Algae	72 hours
triethylenetetramine			
4-nonylphenol, branched	Acute EC50 0.04 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris	Acute LC50 175 mg/l	Fish	96 hours
(dimethylaminomethyl)phenol			
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours
Phenol, 2-nonyl-, branched	Acute LC50 0.017 mg/l	Fish - Pleuronectes americanus	96 hours

Persistence and degradability

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### Product name SIGMACOVER 410 Y / ME HARDENER

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Patty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
xylene ethylbenzene toluene	-	- - -	Readily Readily Readily

## **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	low
4-nonylphenol, branched	5.4	251.19	low
2-methylpropan-1-ol	1	-	low
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)phenol			
ethylbenzene	3.6	79.43	low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	low
toluene	2.73	8.32	low

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

# 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

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## **Product name SIGMACOVER 410 Y / ME HARDENER**

# 14. Transport information

	DOT	IMDG	IATA
UN number	UN3470	UN3470	UN3470
UN proper shipping name	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE
Transport hazard class (es)	8 (3)	8 (3)	8 (3)
Packing group	II	II	II
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide, 4-nonylphenol, branched)	Not applicable.
Product RQ (lbs)	428.04	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.

#### **Additional information**

: Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

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

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

regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

**Transport in bulk according**: Not applicable.

to IMO instruments

# **Section 15. Regulatory information**

#### **United States**

United States inventory (TSCA 8b): All components are active or exempted.

United States - TSCA 12(b) - Chemical export notification:

United States - TSCA 5(a)2 - Proposed significant new use rules:

✓-nonylphenol, branchedPhenol, 2-nonyl-, branchedListedListed

**SARA 302/304** 

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

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## **Product name SIGMACOVER 410 Y / ME HARDENER**

# **Section 15. Regulatory information**

## **SARA 311/312**

Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

HNOC - Corrosive to digestive tract

**HNOC** - Defatting irritant

## **Composition/information on ingredients**

Name	%	Classification
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	≥20 - ≤50	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1A
xylene	≥20 - ≤24	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
4-nonylphenol, branched	≥10 - ≤19	ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 TOXIC TO REPRODUCTION - Category 2 HNOC - Corrosive to digestive tract
2-methylpropan-1-ol	≥10 - ≤12	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
2,4,6-tris(dimethylaminomethyl) phenol	≥1.0 - ≤5.7	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B
ethylbenzene	≥1.0 - ≤4.5	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

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### Product name SIGMACOVER 410 Y / ME HARDENER

## Section 15. Regulatory information

		HNOC - Defatting irritant
3,6-diazaoctanethylenediamin	≤1.3	ACUTE TOXICITY (oral) - Category 4
		ACUTE TOXICITY (dermal) - Category 4
		SKIN CORROSION - Category 1
		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1B
		HNOC - Corrosive to digestive tract
Phenol, 2-nonyl-, branched	<1.0	ACUTE TOXICITY (oral) - Category 4
-		SKIN CORROSION - Category 1
		SERIOUS EYE DAMAGE - Category 1
		TOXIC TO REPRODUCTION - Category 2
		HNOC - Corrosive to digestive tract
toluene	<1.0	FLAMMABLE LIQUIDS - Category 2
		SKIN IRRITATION - Category 2
		TOXIC TO REPRODUCTION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED
		EXPOSURE) - Category 2
		ASPIRATION HAZARD - Category 1
		HNOC - Defatting irritant

#### **SARA 313**

	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification	: xylene	1330-20-7	10 - 30
	4-nonylphenol, branched	84852-15-3	10 - 30
	ethylbenzene	100-41-4	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

#### California Prop. 65

★ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

# Section 16. Other information

**Hazardous Material Information System (U.S.A.)** 

Health: 3 \* Flammability: 3 Physical hazards: 0

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 3 Instability: 0

Date of previous issue : 6/13/2020

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## Product name SIGMACOVER 410 Y / ME HARDENER

## **Section 16. Other information**

Organization that prepared

the SDS

**Key to abbreviations** : ATE = Acute Toxicity Estimate

: EHS

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

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)

N/A = Not available SGG = Segregation Group UN = United Nations

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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