SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to GHS UN rev. 7

Date of issue/Date of revision 26 December 2023

Version 1.01

Section 1. Ident	Section 1. Identification		
Product code	: 00475523		
Product name	: SIGMACOVER 246/410/430 LT HARDENER		
CAS number	: Not applicable.		
Product type	: Liquid.		
Other means of identification Not available.	ition		
Relevant identified uses	of the substance or mixture and uses advised against		
Product use	Coating. Professional applications, Used by spraying.		
Uses advised against	: Product is not intended, labelled or packaged for consumer use.		
Company/undertaking identification	: PPG Industries Sales, Inc. and PPG Coatings (Philippines), Inc. 3rd Floor First Life Center 174 Salcedo St., Legaspi Village Makati City 1229, Philippines Tel # 00632- 752-6773/ Fax # 00632-752-6771		
Emergency telephone number	: CHEMTREC +(63) 2-395-3308 (CCN 17704)		

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (oral) - Category 4
	ACUTE TOXICITY (dermal) - Category 5
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 1
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	SKIN SENSITIZATION - Category 1
	TOXIC TO REPRODUCTION - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract
	irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	AQUATIC HAZARD (ACUTE) - Category 1
	AQUATIC HAZARD (LONG-TERM) - Category 1
	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 9.3%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 17.9%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 54.2%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 21%

GHS label elements

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Harmful if swallowed or if inhaled. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. May cause 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, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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 thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF 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: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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.
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

CAS number/other identifiers		
CAS number	:	Not applicable.

Section 3. Composition/information on ingredients

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Ingredient name	%	CAS number
ethylbenzene	20 - <25	100-41-4
nonylphenol	10 - <20	25154-52-3
xylene	10 - <20	1330-20-7
Cashew, nutshell liq., polymer with diethylenetriamine and formaldehyde	10 - <20	68413-29-6
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	5 - <10	445498-00-0
2-methylpropan-1-ol	5 - <10	78-83-1
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	3 - <5	68082-29-1
fatty acids and triethylenetetramine		
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
p-nonylphenol	<0.1	104-40-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Potential acute health effects	
Eye contact :	Causes serious eye damage.
Inhalation :	Harmful if inhaled. May cause respiratory irritation.
Skin contact :	Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion :	Harmful if swallowed.
Over-exposure signs/symptor	<u>ns</u>
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

Section 4. First aid measures

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

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

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Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds
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.

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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. Collect spillage.	
Methods and materials for containment and cleaning up		
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Precautions for safe handling	
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. 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.
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.

Section 7. Handling and storage

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		
ethylbenzene xylene 2-methylpropan-1-ol			 TLV (Philippines, 4/2016). TLV-Ceiling: 435 mg/m³ 8 hours. TLV-Ceiling: 100 ppm 8 hours. TLV (Philippines, 4/2016). [Xylene] TLV: 0.1 mg/m³ 8 hours. TLV (Philippines, 4/2016). TLV: 300 mg/m³ 8 hours. TLV: 100 ppm 8 hours. 		
Recommended monitoring procedures			riate monitoring standards. Reference to nods for the determination of hazardous		
Appropriate engineering controls		contaminants below any recommende	Is to keep worker exposure to airborne ed or statutory limits. The engineering controls concentrations below any lower explosive		
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 measur	<u>es</u>				
Hygiene measures		eating, smoking and using the lavator Appropriate techniques should be use Contaminated work clothing should no	bughly after handling chemical products, before y and at the end of the working period. Id to remove potentially contaminated clothing. It be allowed out of the workplace. Wash Ensure that eyewash stations and safety ocation.		
Eye/face protection		assessment indicates this is necessar gases or dusts. If contact is possible, unless the assessment indicates a hig	proved standard should be used when a risk y to avoid exposure to liquid splashes, mists, the following protection should be worn, gher degree of protection: chemical splash on hazards exist, a full-face respirator may be		
Skin protection					

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Section 8. Exposure controls/personal 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	1	butyl rubber
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance Physical state : Liquid. Color : Not available. Odor : Amine-like. : Not available. **Odor threshold** Melting point/freezing point : Not available. **Boiling point, initial boiling** : >37.78°C (>100°F) point, and boiling range : Not available. Flammability Lower and upper explosive : Not available. (flammable) limits : Closed cup: 30°C (86°F) **Flash point** Auto-ignition temperature 2 Ingredient name °C °F Method 370 698 nonylphenol **Decomposition temperature** : Not available. pН : Not applicable. Kinematic (40°C): >21 mm²/s Viscosity ŝ, Media Result Solubility(ies) ż cold water Not soluble Partition coefficient: n-: Not applicable. octanol/water Vapor pressure ŝ

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Section 9. Physical and chemical properties

			Vapo	Vapor Pressure at 20°C		Vap	Vapor pressure at 50°C	
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			
Relative density	:	0.92						
Relative vapor density	:	Not available.						
Particle characteristics								
Median particle size	:	Not applicable.						
Evaporation rate		Not available.						

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

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Product/ingredient name	Result	Species	Dose	Exposure
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	-
nonylphenol	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	580 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
,	LD50 Oral	Rat	4.3 g/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	-
Fatty acids, C18-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
dimers, oligomeric reaction			0.0	
products with tall-oil fatty				
acids and				
triethylenetetramine				
	LD50 Oral	Rat	>2000 mg/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl)				
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Section 11. Toxicological information

phenol					
	LD50 Dermal	Rat	1280 mg/kg	-	
	LD50 Oral	Rat	1200 mg/kg	-	
p-nonylphenol	LD50 Oral	Rat	1620 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	
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
-	Skin - Irritant	Human	-	-	-
2,4,6-tris (dimethylaminomethyl) phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

Conclusion/Summary

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

: 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			
Conclusion/Summary						
Skin	: There are no	data available on the mix	ture itself.			
Respiratory	: There are no data available on the mixture itself.					
Mutagenicity						
Conclusion/Summary	: There are no	data available on the mix	ture itself.			
Carcinogenicity						
Conclusion/Summary	: There are no	data available on the mix	ture itself.			
Reproductive toxicity						
Conclusion/Summary	: There are no	data available on the mix	ture itself.			
Teratogenicity						
Conclusion/Summary	: There are no data available on the mixture itself.					
Specific target organ toxici	<u>ty (single exposı</u>	<u>ıre)</u>				

Section 11. Toxicological information

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1
	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2

Information on the likely routes of exposure	: Not available.	
Potential acute health effects		
Eye contact	: Causes serious eye damage.	
Inhalation	: Harmful if inhaled. May cause respiratory irritation.	
Skin contact	: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.	
Ingestion	: Harmful if swallowed.	
Symptoms related to the physical sector by the sector by t	 ical, chemical and toxicological characteristics 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	

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 effe	<u>cts</u>	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health eff	iect	<u>s</u>
Not available.		
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.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Reproductive toxicity

Route	ATE value
Oral	1163.93 mg/kg
Dermal	2422.33 mg/kg
Inhalation (vapors)	18.4 mg/l
Inhalation (dusts and mists)	1.9 mg/l

: Suspected of damaging fertility or the unborn child.

Other information

Prolonged or repeated contact may dry skin and cause irritation. 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.

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
nonylphenol	Acute EC50 0.056 mg/l Fresh water	Algae - Desmodesmus	72 hours
		subspicatus	
	Chronic EC10 0.003 mg/l Fresh water	Algae - Desmodesmus	72 hours
		subspicatus	
	Chronic NOEC 1 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Fatty acids, C18-unsatd.,	EC10 1.78 mg/l	Algae	72 hours
dimers, oligomeric reaction products with tall-oil fatty acids and			
triethylenetetramine 2,4,6-tris	Acute LC50 175 mg/l	Fish	96 hours
(dimethylaminomethyl)phenol			30 110013
p-nonylphenol	Acute EC50 134.1 μg/l Marine water	Algae - <i>Phaeodactylum</i> <i>tricornutum</i> - Exponential growth phase	72 hours
	Chronic EC10 73.8 µg/l Marine water	Algae - <i>Phaeodactylum</i> <i>tricornutum</i> - Exponential growth phase	72 hours

Persistence and degradability

Product/ingredient name	Test	Result	t	Dose		Inoculum
ethylbenzene	-	79 % -	Readily - 10 days	-		-
Product/ingredient name	Aquatic h	alf-life	Photolysis	÷	Biode	gradability
ethylbenzene xylene Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-		-		Readil Readil Not rea	ý

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ethylbenzene	3.6	79.43	Low
nonylphenol	3.28	154.88	Low
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
p-nonylphenol	5.76	380.19	Low

Mobility in soil

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

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
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	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(nonylphenol)	Not applicable.

Additional information

IMDG

ΙΑΤΑ

UN : None identified.

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

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Section 15. Regulatory information

International regulations

Montreal Protocol

Not listed.

History

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

History	
Date of issue/Date of revision	: 26 December 2023
Date of previous issue	: 12/15/2023
Version	: 1.01
Prepared by	: EHS
ey to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate 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) UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 5	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 1	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method

✓ Indicates information that has changed from previously issued version.

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