SAFETY DATA SHEET

Date of issue/Date of revision 20 May 2021

Version 9

Section 1. Identification

Product code	:	00333194
Product name	:	SIGMACOVER 435/456 US HARDENER
Product type	÷	Liquid.
Other means of identification Not available.		
Relevant identified uses of the	es	substance or mixture and uses advised against
Product use	:	Coating. Industrial applications.
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 5
	ACUTE TOXICITY (dermal) - Category 5
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 1C
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 69.6%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 69.6%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 75%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 76.5%
GHS label elements	
Hazard pictograms	
Signal word	: Danger

Section 2. Hazards identification

Hazard statements	Fammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation.
Precautionary statements	
Prevention	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 breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately cal 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	Frolonged or repeated contact may dry skin and cause irritation.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number : Not applicable.		
Ingredient name	%	CAS number
₽-methylpropan-1-ol	10 - <20	78-83-1
xylene	5 - <10	1330-20-7
2,4,6-tris(dimethylaminomethyl)phenol	5 - <10	90-72-2
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	1 - <3	68082-29-1
fatty acids and triethylenetetramine		
ethylbenzene	1 - <3	100-41-4

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/e	ffects, acute and delayed
Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	:
Ingestion	: May be harmful if swallowed.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate me	lical 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, 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.
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, protect	tive 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 co	ntainment 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	Fut 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. 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.
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	Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-methylpropan-1-ol	TLV (Philippines, 4/2016).
	TLV: 300 mg/m ³ 8 hours.
	TLV: 100 ppm 8 hours.
xylene	TLV (Philippines, 4/2016).
	TLV: 0.1 mg/m ³ 8 hours.
ethylbenzene	TLV (Philippines, 4/2016).
	TLV-Ceiling: 435 mg/m ³ 8 hours.
	TLV-Ceiling: 100 ppm 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.

Section 8. Exposure controls/personal protection

Environmental exposure controls also need to keep gas, 'appor 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 ensitive they comply with the requirements of environmental protection legislation. In soi cases, fume scrubbers, filters or engineening modifications the process equipment will be necessary to reduce emissions to acceptable levels. Individual protection measures : Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated cloth Contaminated work clothing should not be allowed out of the working period. Eye/face protection : Safety eyewear complying with an approved standard should be used when a ris assessment indicates this is necessary to avoid exposure to liquid splashes, mis gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may required instead. Skin protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicat this is necessary. Considering the parameters specified by the glove manufactu 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 manufactu check during use that the gloves are still retain the t	•	• •
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, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated cloth Contaminated 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. Eyelface protection : Safety eyewear complying with an approved standard should be used when a ris assessment indicates this is necessary to avoid exposure to liquid splashes, mis gases or dusts. If contact is possible, the following protection should be work nucleas the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may required instead. Skin protection : Chemical-resistant, impervious gloves complying with an approved standard should be work at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufactu 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 loy device and should be approved by a specialist before handling this product. When there is a risk of ginition from static electricit wear anti-static protection reduction reduction from static closting. For the greatest protection from static electricit wear anti-static protection relay of a specialist before handling this product. When there is a risk of ginition from static electricit we	controls Environmental exposure	 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. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated cloth 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: Safety eyewar complying with an approved standard should be used when a ris assessment indicates this is necessary to avoid exposure to liquid splashes, mis gases or dusts. If contact is possible, the following protection should be worn unless the assessment indicates a higher degree of protection. chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may required instead.Skin 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 manufactu 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 manufactures. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.Gloves: nitrile neopreneBody protection: Personal protective equipment for the body should be selected based on the tas 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 electrici discharges, clothing should include anti-static overalls, boots an		
Evelface protectioneating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated cloth Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety 	Individual protection measured	<u>ires</u>
Skin protection:::	Hygiene measures	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
Hand protection: Chemical-resistant, impervious gloves complying with an approved standard sho be worn at all times when handling chemical products if a risk assessment indica this is necessary. Considering the parameters specified by the glove manufactur 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 		unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be
be worn at all times when handling chemical products if a risk assessment indicat this is necessary. Considering the parameters specified by the glove manufactur 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:nitrile neopreneBody 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 electricit 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 import	Skin protection	
 Body protection Personal protective equipment for the body should be selected based on the tash 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 electricit 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. 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 import 	Hand protection	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
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 electricit 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 b approved by a specialist before handling this product.Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets th appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other import	Gloves	: nitrile neoprene
 Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets thappropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other import 	Body protection	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
appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other import	Other skin protection	selected based on the task being performed and the risks involved and should be
	Respiratory protection	respiratory protection program to ensure proper fitting, training, and other important

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	: Characteristic.
Odor threshold	: Not available.

Section 9. Physical and chemical properties

· · ·		· · ·				
Melting point/freezing point	1	Not available.				
Boiling point, initial boiling point, and boiling range	1	>37.78°C (>100°F)				
Flammability	:	Not available.	lot available.			
Lower and upper explosive (flammable) limits	:	Not available.	Not available.			
Flash point	:	Closed cup: 35°C (95°F)				
Auto-ignition temperature	1	Ingredient name	°C	°F	Method	
		2,4,6-tris(dimethylaminomethyl)phenol	382	719.6	EU A.15	
Decomposition temperature	:	Not available.		I		
рН	1	Not applicable.				
Viscosity	1	kinematic (40°C): >21 mm²/s				
Solubility	1	Insoluble in the following materi	als: cold	water.		
Solubility in water	:	10.6 g/l				
Partition coefficient: n- octanol/water	1	Not applicable.				
Vapor pressure	:	Ø.97 kPa (7.3 mm Hg)				
Relative density	:	0.95				
Relative vapor density	1	Not available.	Not available.			
Particle characteristics						
Median particle size	1	Not applicable.				
Evaporation rate	1.	0.61 (butyl acetate = 1)				

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
Hazardous polymerization	 Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/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	-
	LD50 Oral	Rat	3.5 g/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

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

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	
2,4,6-tris (dimethylaminomethyl) phenol	skin	Guinea pig	Sensitizing	
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 mixture itself.

Respiratory

: There are no data available on the mixture itself.

Mutagenicity

Section 11. Toxicological information

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

: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
e thylbenzene	Category 2	-	hearing organs

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	: Not available.
Potential acute health effec	
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Zauses severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed.
Symptoms related to the ph	sical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness

Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing

Philippines GHS

Section 11. Toxicological information

Skin contact	: Adverse symptoms may include the following:
	pain or irritation
	redness
	dryness
	cracking
	blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

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

Delayed and infinitediate effec	to and also enrolle encets non short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects Long term exposure	: Not available.
Potential immediate	: Not available.

effects Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	2558.07 mg/kg
Dermal	2029.92 mg/kg
Inhalation (vapors)	28.75 mg/l
Inhalation (dusts and mists)	3.69 mg/l

Other information

Folonged 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
2-methylpropan-1-ol 2.4.6-tris	Acute EC50 1100 mg/l Acute LC50 175 mg/l	Daphnia Fish	48 hours 96 hours
(dimethylaminomethyl)phenol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and	5	Algae	72 hours
triethylenetetramine ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours

Persistence and degradability

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

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
 P-methylpropan-1-ol xylene 2,4,6-tris (dimethylaminomethyl)phenol 	1 3.12 0.219	- 7.4 to 18.5 -	low low low
ethylbenzene	3.6	79.43	low

<u>Mobility in soil</u>		
Soil/water partition coefficient (Koc)	: 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 or all authorities with jurisdiction. Waste packaging should be recycled. Incineration 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 resid 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, 	be of n or nd ues
---	-------------------------------

Philippines GHS

Section 13. Disposal considerations

waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III		III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: None identified.

Special precautions for user :**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 20 May 2021
Date of previous issue	: 1/16/2020
Version	: 9
Prepared by	: EHS

Section 16. Other information

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 = 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)
	UN = United Nations

Procedure used to derive the classification

Classification	Justification
AMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Indicates information that has changed from previously issued version.

Notice to reader

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 us, 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.