SAFETY DATA SHEET



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

Date of issue/Date of revision 27 March 2024 Version 2

Section 1. Identification

Product code	: 000001198035
Product name	: SIGMAGLIDE 790 C HARDENER
Product type	: Liquid.
Other means of identification 00472262	
Relevant identified uses of the	e 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 substance or mixture	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 5
Substance of mixture	SKIN CORROSION/IRRITATION - Category 1B
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	SKIN SENSITIZATION - Category 1
	GERM CELL MUTAGENICITY - Category 2
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	AQUATIC HAZARD (ACUTE) - Category 2
	AQUATIC HAZARD (LONG-TERM) - Category 2
	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity:
	32.1%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 96.8%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 96.8%
GHS label elements	
Hazard pictograms	

Section 2. Hazards identification

Signal word	Danger
Hazard statements	 Farmful if swallowed. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause damage to organs. (thymus) May cause damage to organs through prolonged or repeated exposure. (immune system) Toxic to aquatic life with long lasting effects.
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. 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: Call a POISON CENTER or doctor. 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.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : Causes respiratory tract burns.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

%	CAS number
25 - <50	17689-77-9
20 - <25	4253-34-3
20 - <25	SUB142892
3 - <5	13170-23-5
3 - <5	1067-33-0
	25 - <50 20 - <25 20 - <25 3 - <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 necessa	iry 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 symp	toms/effects, acute and delayed
Potential acute healt	h effects
Eye contact	: Causes serious eye damage.
Inhalation	: Corrosive to the respiratory system.
Skin contact	: Causes severe burns. May be harmful in contact with skin. May cause damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.
Ingestion	: May cause burns to mouth, throat and stomach. Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
Over-exposure signs	s/symptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness 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 immedia	te medical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments
Protection of first-aiders
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.

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: $ u$ se an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. This material is 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 metal oxide/oxides Formaldehyde.
Special protective actions for fire-fighters	: Fromptly 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.
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 For emergency responders	 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. 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 con	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. 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. 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. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. 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. 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		Exposure limits	
dibutyltin di(acetate)			TLV (Philippines, 4/2016). [Tin (organic compounds)] TLV: 0.1 mg/m ³ 8 hours.
Recommended monitoring procedures	:		riate monitoring standards. Reference to nods for the determination of hazardous
Appropriate engineering controls	:		user operations generate dust, fumes, gas, s, local exhaust ventilation or other engineering irborne contaminants below any
Environmental exposure controls	:	Emissions from ventilation or work pro	

Individual protection measures

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	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, 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 be required instead.
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	: nitrile neoprene
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.
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	Υ.	Liquid.				
Color		Clear.				
Odor		Hydrocarbon. [Strong]				
Odor threshold	:	Not available.				
Melting point/freezing point	:	Not available.				
Boiling point, initial boiling point, and boiling range	:	>37.78°C (>100°F)				
Flammability	:	Not available.				
Lower and upper explosive (flammable) limits	:	Not available.				
Flash point	:	Closed cup: 99°C (210.2°	F)			
Auto-ignition temperature	:	Ingredient name	°C	°F	Method	
		triacetoxyethylsilane	382	719.6		
Decomposition temperature	:	Not available.		I		

Philippines

Section 9. Physical and chemical properties

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рН	:	Not applicable.						
Viscosity	:	Kinematic (40°C): >21 mm²/s						
Solubility/icc)		Media	Re	sult				
Solubility(ies)		cold water	No	t solubl	e			
Partition coefficient: n- octanol/water	:	Not applicable.						
Vapor pressure	:	Vapor Pressure at 20°C		Vaj	Vapor pressure at 50°C			
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		triacetoxyethylsilane	0.7500615	0.1				
Relative density	:	1.16						I
Relative vapor density	:	Not available.						
Particle characteristics								
Median particle size	- 1	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 Hazardous polymerization	 Depending on conditions, decomposition products may include the following materials: carbon oxides Formaldehyde. metal oxide/oxides 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
triacetoxyethylsilane	LD50 Oral	Rat	1.462 g/kg	-
methylsilanetriyl triacetate	LD50 Oral	Rat	2060 mg/kg	-
dibutyltin di(acetate)	LD50 Dermal	Rabbit	2318 mg/kg	-
Conclusion/Summary rritation/Corrosion	: There are no data av	ailable on the mixture i	tself.	
Conclusion/Summary				
Skin	: There are no data av	ailable on the mixture i	tself	

Section 11. Toxicological information

Eyes	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Sensitization	
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.
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		Route of exposure	Target organs
methylsilanetriyl triacetate	Category 3	-	Respiratory tract irritation
dibutyltin di(acetate)	Category 1	oral	thymus

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
₩butyltin di(acetate)	Category 1	-	immune system

Aspiration hazard

Not available.

Information on the likely routes of exposure	: Not available.
Potential acute health effec	<u>ts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Corrosive to the respiratory system.
Skin contact	: Causes severe burns. May be harmful in contact with skin. May cause damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.
Ingestion	: May cause burns to mouth, throat and stomach. Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
Symptoms related to the ph	nysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness

Section 11. Toxicological information

Inhalation :	Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact :	Adverse symptoms may include the following: pain or irritation redness 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

Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		

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General	 May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: Suspected of causing genetic defects.
Reproductive toxicity	: May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	1634.99 mg/kg
Dermal	2440 mg/kg

Other information

Causes respiratory tract burns. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F).

Section 12. Ecological information

Toxicity					
Product/ingredient name	Result	Species	Exposure		
dībutyltin di(acetate)	Acute EC10 3.1 mg/l Acute EC50 0.5 mg/l	Fish Algae	72 hours 72 hours		

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
díbutyltin di(acetate)	-	-	Not readily

Bioaccumulative potential

Not available.

<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 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
			1010
UN number	UN3066	VN3066	VN3066
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	8	8	8
Packing group	I	Ι	I
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.	(dibutyltin di(acetate))	Not applicable.

Philippines

Section 14. Transport information

Additional information

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	: 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

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

112.4

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 27 March 2024
Date of previous issue	: 8/14/2023
Version	: 2
Prepared by	: EHS
key 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 = International Air Transport Association IBC = 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
CUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 5	Calculation method
SKIN CORROSION/IRRITATION - Category 1B	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 2	Calculation method
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Philippines

Section 16. Other information

AQUATIC HAZARD (LONG-TERM) - Category 2

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.