SAFETY DATA SHEET



Date of issue/Date of revision 11 June 2024

Version 2.08

Section 1. Identification		
Product code	: 000001173697	
Product name	: SIGMAFAST 20 GREY	
Other means of identificati	on	
00261714; 00261715; 00311	436	
Product type	: Liquid.	
Relevant identified uses of	the substance or mixture and uses advised against	
Product use	Coating. Professional applications, Used by spraying.	
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737	
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)	

Section 2. Hazards identification

Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
GHS label elements, includin	g precautionary statements
Hazard pictograms	
Signal word	: Warning
Hazard statements	: Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.
Precautionary statements	

Sin	gapore	English (US)	Page: 1/13	
-----	--------	--------------	------------	--

Section 2. Hazards identification

Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapor. Wash thoroughly after handling.
Response	: IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Not applicable.
Other hazards which do not	Prolonged or repeated contact may dry skin and cause irritation

result in classification

Other hazards which do not : 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 EC number	: Not applicable. : Mixture.			
		0/		
Ingredient name		%	CAS number	
x ylene		20 - <25	1330-20-7	
Talc , not containing as	bestiform fibres	5 - <10	14807-96-6	
ethylbenzene		3 - <5	100-41-4	
Quaternary ammonium	compounds, C12-14 (even-numbered)-	0.3 - <1	1474044-65-9	
alkylethyldimethyl, ethyl sulphates				
Octadecanamide, N,N'-1,6-hexanediylbis[12-hydroxy- 0.3 - <1 55349-01-4				

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 : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. **Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Singapore	English (US)	Page: 2/13
-----------	--------------	------------

Version 2.08

Section 4. First aid measures

Most important symptoms/effects, acute and delayed		
Potential acute health effe	<u>cts</u>	
Eye contact	1	Causes serious eye irritation.
Inhalation	1	Harmful if inhaled. May cause respiratory irritation.
Skin contact	1	Causes skin irritation. Defatting to the skin.
Ingestion	1	No known significant effects or critical hazards.
Over-exposure signs/sym	ptom	<u>15</u>
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	:	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	:	No specific data.
Indication of immediate me	dica	l attention and special treatment needed, if necessary
Notes to physician		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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 metal oxide/oxides
Singapore English (US)	Page: 3/13

Section 5. Fire-fighting measures

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

Section 6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. 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
₩ylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006).
ethylbenzene	PEL (long term): 2 mg/m ³ 8 hours. Workplace Safety and Health Act
Singapore English (US)	Page: 5/13

Section 8. Exposure controls/personal protection

		(Singapore, 2/2006). PEL (short term): 543 mg/m ³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
Recommended monitoring procedures	:	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measur	res	
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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Chemical splash goggles.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	:	For prolonged or repeated handling, use the following type of gloves:
		Not recommended: nitrile rubber Recommended: polyvinyl alcohol (PVA), Viton®
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.
Cincerer Fraliah (UC)		Domos 6/42

Singapore English (US)

Product name SIGMAFAST 20 GREY

Section 8. Exposure controls/personal protection

Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
------------------------	--

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: Liqu	Juid.
Color	: Gra	ay.
Odor	: Aro	omatic. [Slight]
рН	: inso	oluble in water.
Boiling point	: >37	7.78°C (>100°F)
Flash point	: Clo	osed cup: 31°C (87.8°F)
Evaporation rate		ghest known value: 0.84 (ethylbenzene) Weighted average: 0.78compared with tyl acetate
Flammability (solid, gas)	: liqu	Jid
Vapor pressure		ghest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted erage: 0.95 kPa (7.13 mm Hg) (at 20°C)
Vapor density	: Hig	ghest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)
Relative density	: 1.4	17
Colubility/ico)	. Me	edia Result
Solubility(ies)	col	ld water Not soluble
Auto-ignition temperature	: Lov	west known value: 432°C (809.6°F) (xylene).
Viscosity	: Kin	nematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
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	-
Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	LD50 Dermal	Rabbit	528 mg/kg	-
	LD50 Oral	Rat	570 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	-
Conclusion/Summary					
Skin	There are no data available	on the mixtur	e itself.		
Eyes	There are no data available	on the mixtur	e itself.		
Respiratory	There are no data available	on the mixtur	e itself.		
Sensitization					
Conclusion/Summary					
Skin	There are no data available	on the mixtur	e itself.		
Respiratory	There are no data available	on the mixtur	e itself.		
Mutagenicity					
Conclusion/Summary	: There are no data availabl	e on the mixtu	re itself.		
Carcinogenicity					
Conclusion/Summary	: There are no data availabl	e on the mixtu	re itself.		
Reproductive toxicity					
Conclusion/Summary	: There are no data availabl	e on the mixtu	re itself.		
Teratogenicity					
Conclusion/Summary	: There are no data availabl	e on the mixtu	re itself.		
Specific target organ toxic	<u>ity (single exposure)</u>				

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation

Singapore English (US)	Page: 8/13
------------------------	------------

Section 11. Toxicological information

Name			Category	Route	of	Target organs
				exposu	ire	
ethylbenzene			Category 2	-		hearing organs
Aspiration hazard						
Name				Result		
xylene ethylbenzene						RD - Category 1 RD - Category 1
nformation on the likely outes of exposure	:	Not available.				
Potential acute health effect	<u>:ts</u>					
Eye contact	:	Causes serious eye irritati	on.			
Inhalation	: Harmful if inhaled. May cause respiratory irritation.					
Skin contact	: Causes skin irritation. Defatting to the skin.					
Ingestion	: No known significant effects or critical hazards.					
Symptoms related to the p	<u>hysi</u>	cal, chemical and toxicold	ogical charac	teristics		
Eye contact	:	Adverse symptoms may in pain or irritation watering redness	clude the follo	owing:		
Inhalation	:	Adverse symptoms may in respiratory tract irritation coughing	clude the follo	owing:		
Skin contact	:	Adverse symptoms may in irritation redness dryness cracking	clude the folle	owing:		
Ingestion	:	No specific data.				
Delayed and immediate eff	<u>ects</u>	and also chronic effects	from short a	nd long term	<u>exposu</u> i	re
<u>Short term exposure</u>						
Potential immediate		Not available.				

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

Singapore	English (US)	Page: 9/13
-----------	--------------	------------

Section 11. Toxicological information

General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
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
Dermal	2465.78 mg/kg
Inhalation (vapors)	37.74 mg/l
Inhalation (dusts and mists)	4.82 mg/l

Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. 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

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	-
Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl	EC50 0.14 mg/l	Algae	72 hours
sulphates	EC50 0.036 mg/l	Daphnia	48 hours
	LC50 13.8 mg/l	Fish	96 hours
	NOEC 10 mg/m ³	Algae	72 hours
	NOEC 7 mg/m ³	Daphnia	21 days
	NOEC 3.2 mg/m ³	Fish	28 days

Conclusion/Summary

: There are no data available on the mixture itself.

Persistence/degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	-	79 % - Readily - 10 days 67.77 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	-	-	Readily Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene ethylbenzene Quaternary ammonium compounds, C12-14 (even- numbered)- alkylethyldimethyl, ethyl sulphates	3.12 3.6 3.2	7.4 to 18.5 79.43 -	Low Low 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
------------------	---

Section 13. Disposal considerations

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	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
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

Singapore - hazardous chemicals under government control

None.

International regulations Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Version 2.08

Section 16. Other information

History

Date of issue/Date of	: 11 June 2024
revision	
Date of previous issue	: 2/1/2024
Version	: 2.08
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 = 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

✓ 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 PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.