SAFETY DATA SHEET



FASTCOAT ENAMEL WHITE BS00E55

Section 1. Identific	cation
Product identifier	: FASTCOAT ENAMEL WHITE BS00E55
Product code	: FAFD10001XXX
Other means of	: Not available.
identification	
Product type	: Liquid.
Relevant identified uses of th	ne substance or mixture and uses advised against
Identified uses	
Not applicable.	
Uses advised against Not applicable.	
Supplier's details	: Berger Paints Singapore Pte Ltd 22 Benoi Sector, Singapore - 629854 Email: Berger@bergeronline.com.sg Tele: +65 6801 7000 Fax: +65 6265 6356
Emergency telephone number (with hours of operation)	: Tele: +65 9636 4852
Section 2. Hazards	s identification
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3
GHS label elements, includin	a precautionary statements
Hazard pictograms	
Signal word	: Warning
Hazard statements	: H226 - Flammable liquid and vapor.
Precautionary statements	
Prevention	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
Naphtha (petroleum), hydrodesulfurized heavy	≥25 - ≤50	64742-82-1
Naphtha (petroleum), hydrodesulfurized heavy	≥10 - ≤25	64742-82-1
xylene	≤5	1330-20-7
1,2,4-trimethylbenzene	≤3	95-63-6

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.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>cts</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	dical 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.

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 dioxide carbon monoxide metal oxide/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	ctiv	e 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. 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	onta	ainment 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

sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, 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

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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.
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 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. 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
xylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene]
	PEL (long term): 100 ppm 8 hours. PEL (long term): 434 mg/m ³ 8 hours. PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes.
1,2,4-trimethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). [Trimethyl benzene] PEL (long term): 25 ppm 8 hours. PEL (long term): 123 mg/m ³ 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

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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	: 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: safety glasses with side-shields.
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.
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 and safety characteristics

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

Appearance

Physical state	: Liquid.
Color	: White.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: Not available.
Flash point	: Closed cup: 40°C (104°F)
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
Vapor pressure	1

Section 9. Physical and chemical properties and safety characteristics

	V	apor Pressur	re at 20°C	\ \	Vapor pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method		
ethylbenzene	9.30076	1.2						
xylene	6.7	0.89						
mesitylene	2.4002	0.32						
1,2,4-trimethylbenzene	2.25018	0.3						
2,6-dimethylheptan-4-one	1.72514	0.23						
Stoddard solvent, 0-5% aromatic content	0.75006 to 10.50085	0.1 to 1.4						
Relative vapor density	: Not ava	ilable.	•		•			
Relative density	: Not ava	ilable.						
Density	: 1.08 g/c	m³ [25°C (77	°F)]					
Solubility in water	: Not ava	ilable.						
liscible with water	: No.							
Partition coefficient: n- octanol/water	: Not app	licable.						
Auto-ignition temperature	:							
Ingredient name		°C	°F	N	lethod			
	ontent	230 to 240	446 to 464					
Stoddard solvent, 0-5% aromatic co								
Stoddard solvent, 0-5% aromatic co Naphtha (petroleum), hydrodesulfu	rized heavy	280 to 470	536 to 878	•				
	-	280 to 470 280 to 470	536 to 878 536 to 878					
Naphtha (petroleum), hydrodesulfu	-				J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu	-	280 to 470	536 to 878		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime	-	280 to 470 314 to 317	536 to 878 597.2 to 60		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime 2,6-dimethylheptan-4-one	-	280 to 470 314 to 317 345	536 to 878 597.2 to 60 653		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime 2,6-dimethylheptan-4-one xylene	-	280 to 470 314 to 317 345 432	536 to 878 597.2 to 60 653 809.6		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime 2,6-dimethylheptan-4-one xylene ethylbenzene	-	280 to 470 314 to 317 345 432 432.22	536 to 878 597.2 to 60 653 809.6 810		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime 2,6-dimethylheptan-4-one xylene ethylbenzene 1,2,4-trimethylbenzene	rized heavy	280 to 470 314 to 317 345 432 432.22 500 559	536 to 878 597.2 to 60 653 809.6 810 932		J A.15			
Naphtha (petroleum), hydrodesulfu Naphtha (petroleum), hydrodesulfu 2-butanone oxime 2,6-dimethylheptan-4-one xylene ethylbenzene 1,2,4-trimethylbenzene mesitylene	rized heavy	280 to 470 314 to 317 345 432 432.22 500 559 ilable.	536 to 878 597.2 to 60 653 809.6 810 932		J A.15			

Section 10. Sta	Diffy 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	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials

Date of issue/Date of revision

Section 10. Stability and reactivity

Hazardous decomposition products SADT : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Not available.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
	LD50 Oral	Rat	5 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name		Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Naphtha (petroleum), hydrodesulfurized heavy	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely : Not available.

routes of exposure

Potential acute health effects

: No known significant effects or critical hazards.

Date of issue/Date of revision

Eye contact

Section 11. Toxicological information

Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effe	cts 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	: Not available.
Potential chronic health eff	ects
Not available.	
General	: No known significant effects or critical hazards.
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

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
FASTCOAT ENAMEL WHITE BS00E55	N/A	7844.4	36919.2	526.3	N/A
xylene	4300	1100	5000	N/A	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	N/A

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1,2,4-trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - <i>Elasmopus</i> pectenicrus - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours

Persistence/degradability

Not available.

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Naphtha (petroleum), hydrodesulfurized heavy	-	10 to 2500	High
Naphtha (petroleum), hydrodesulfurized heavy	-	10 to 2500	High
xylene	3.12	8.1 to 25.9	Low
1,2,4-trimethylbenzene	3.63	243	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 methods	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	ADR/RID	ADN
UN1263	UN1263	UN1263	UN1263	UN1263
PAINT	PAINT	PAINT	PAINT	PAINT
3	3	3	3	3
Ш	111	111	111	III
No.	No.	No.	No.	Yes.
	UN1263 PAINT 3 W	UN1263 PAINT 3 3 111 UN1263 PAINT PAINT III III	UN1263 UN1263 UN1263 PAINT PAINT PAINT 3 3 3 3	UN1263UN1263UN1263UN1263PAINTPAINTPAINTPAINT3333IIIIIIIIIIII

ADR/RID

: Tunnel code (D/E)

ADN

The product is only re-

: The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

Section 14. Transport information

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 available. to IMO instruments

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

<u>Inventory nat</u>	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory: Not determined.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

: 11/24/2024
: 11/24/2024
: 1/10/2023
: 2.11

Section 16. Other information

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 = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	N/A = Not available
	SGG = Segregation Group
	UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data

References

: Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.