SAFETY DATA SHEET



SteelMaster 60SB

Section 1. Identification		
GHS product identifier	: SteelMaster 60SB	
Other means of identification	: Not available.	
Product code	: 14880	
Product description	: Paint.	
Product type	: Liquid.	
Relevant identified uses of the substance or mixture and uses advised against Identified uses		
Use in coatings - Industrial us	e	
Use in coatings - Professional	use	
Manufacturing country	: Jotun (Cambodia) Limited Oval Office Tower – 18th floor, Street 360 (corner Norodom Boulevard), Sangkat Boeung Keng Kang I Khan Chamkarmon, Phnom Penh, Cambodia.	
	Office: +855 78 755 755 SDSJotun@jotun.com	

Emergency telephone number : +47 33 45 70 00 Jotun Norway (head office)

Section 2. Hazards identification

Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A REPRODUCTIVE TOXICITY (Fertility) - Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Warning.
Hazard statements	: H226 - Flammable liquid and vapour. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H361 - Suspected of damaging fertility.
Precautionary statements	
Prevention	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P264 - Wash hands thoroughly after handling.

Date of issue	: 01.12.2020

result in classification

Section 2. Hazards identification

Response	 P308 + P313 - IF exposed or concerned: Get medical attention. P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. P332 + P313 - If skin irritation occurs: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
Storage	: P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
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	: Mixture		
Other means of identification	: Not available.		
CAS number/other identifiers			
CAS number	: Not applicable.		
EC number	: Mixture.		
Product code	: 14880		
Ingredient name		%	CAS number
xylene		≥10 - <20	1330-20-7
melamine		≤10	108-78-1
ethylbenzene		<10	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.

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. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

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Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	÷	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symptom	<u>15</u>	
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	:	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Indication of immediate medical	la	ttention and special treatment needed, if necessary
Notos to physician	а.	In case of inhalation of decomposition products in a fire

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

<u>Extinguishing media</u>	
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 vapour. 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.

Section 5. Firefighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides carbonyl halides 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, protective equipment and emergency procedures

For non-emergency personnel	 No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised 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 spilt 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 material for cont	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 the 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling : 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.

Control parameters

Section 7. Handling and storage

 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 ventilated area, away from incompatible materials (see Section 10) and food an drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Contain that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. 	and well- l and ng tainers nt nt to
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Section 8. Exposure controls/personal protection

Occupational exposure limit	<u>s</u>	
Ingredient name		Exposure limits
xylene ethylbenzene		Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours. Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.
Recommended monitoring procedures	atmos of the protec standa	product contains ingredients with exposure limits, personal, workplace phere or biological monitoring may be required to determine the effectiveness ventilation or other control measures and/or the necessity to use respiratory tive equipment. Reference should be made to appropriate monitoring ards. Reference to national guidance documents for methods for the nination of hazardous substances will also be required.
Appropriate engineering controls	ventila contar also ne	hly with adequate ventilation. Use process enclosures, local exhaust tion or other engineering controls to keep worker exposure to airborne ninants below any recommended or statutory limits. The engineering controls eed to keep gas, vapour or dust concentrations below any lower explosive Use explosion-proof ventilation equipment.
Environmental exposure controls	they co cases,	ions from ventilation or work process equipment should be checked to ensure omply with the requirements of environmental protection legislation. In some fume scrubbers, filters or engineering modifications to the process nent will be necessary to reduce emissions to acceptable levels.
Individual protection measure	<u>s</u>	
Hygiene measures	eating Appro Wash	hands, forearms and face thoroughly after handling chemical products, before , smoking and using the lavatory and at the end of the working period. priate techniques should be used to remove potentially contaminated clothing. contaminated clothing before reusing. Ensure that eyewash stations and showers are close to the workstation location.
Eye/face protection	indicat dusts.	eyewear complying to EN 166 should be used when a risk assessment es this is necessary to avoid exposure to liquid splashes, mists, gases or If contact is possible, the following protection should be worn, unless the sment indicates a higher degree of protection: chemical splash goggles.
Skin protection		
Hand protection	be wor this is check should differe	ical-resistant, impervious gloves complying with an approved standard should on at all times when handling chemical products if a risk assessment indicates necessary. Considering the parameters specified by the glove manufacturer, during use that the gloves are still retaining their protective properties. It l be noted that the time to breakthrough for any glove material may be nt for different glove manufacturers. In the case of mixtures, consisting of al substances, the protection time of the gloves cannot be accurately ited.

Section 8. Exposure controls/personal protection

	There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use,
	storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material.
	Always ensure that gloves are free from defects and that they are stored and used correctly.
	The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
	Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
	Wear suitable gloves tested to EN374. Not recommended, gloves(breakthrough time) < 1 hour: butyl rubber May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, PVC Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber, 4H, Teflon, polyvinyl alcohol (PVA)
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.
	If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: White.
Odour	: Characteristic.
Odour threshold	: Not available.
рН	Not applicable.
Melting point	: Not applicable.
Boiling point	: Lowest known value: 136.1°C (277°F) (ethylbenzene). Weighted average: 136.14°C (277.1°F)
Flash point	: Closed cup: 24°C (75.2°F)
Burning time	: Not applicable.
Burning rate	: Not applicable.
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared with butyl acetate
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: 0.8 - 6.7%
Vapour pressure	 Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.98 kPa (7.35 mm Hg) (at 20°C)
Vapour density	: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)
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Section 9. Physical and chemical properties

Relative density	1	1.349 g/cm³
Solubility	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	Lowest known value: 432°C (809.6°F) (xylene).
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s)
Aerosol product		

Reactivity	No specific test data related to reactivity available for this pr	oduct or its ingredients.
Chemical stability	The product is stable.	
Possibility of hazardous reactions	Inder normal conditions of storage and use, hazardous rea	ctions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do n praze, solder, drill, grind or expose containers to heat or sou	
Incompatible materials	Keep away from the following materials to prevent strong ex oxidising agents, strong alkalis, strong acids.	othermic reactions:
Hazardous decomposition products	Inder normal conditions of storage and use, hazardous dec should not be produced.	composition products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Vapour LD50 Oral TDLo Dermal	Rat	20 mg/l 4300 mg/kg 4300 mg/kg	4 hours - -
melamine ethylbenzene	LD50 Oral LC50 Inhalation Vapour LD50 Dermal LD50 Oral	Rat	3161 mg/kg	- 4 hours - -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene melamine	Eyes - Mild irritant Skin - Mild irritant Eyes - Mild irritant	Rabbit Rat Rabbit	-	87 milligrams 8 hours 60 microliters 24 hours 500 milligrams	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
Specific target organ toxicity (repeate	ed exposure)		
Name	Category	Route of exposure	Target organs

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

Potential acute health effects		
Eye contact	÷	Causes serious eye irritation.
Inhalation	÷	No known significant effects or critical hazards.
Skin contact	÷	Causes skin irritation.
Ingestion	;	No known significant effects or critical hazards.
Symptoms related to the physic	al,	chemical and toxicological characteristics
Inhalation	:	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	:	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Potential chronic health effects	1	
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	;	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	÷	Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	5726.59 mg/kg
Inhalation (vapours)	75.75 mg/l

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
	Acute EC50 7.2 mg/l Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l	Daphnia	48 hours 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene	-		Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	<3.8	low
melamine	-1.22		low
ethylbenzene	3.6		low

Mobility in soil

Soil/water partition coefficient (K _{oc})	: 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 minimised 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. Vapour 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 spilt material and runoff and contact with
	soil, waterways, drains and sewers.

Section 14. Transport information UN IMDG IATA UN number UN1263 UN1263 UN1263 UN proper shipping name Paint Paint Paint Image: Ima

Section 14. Transport information

	ransport information		
Transport hazard class(es)		3	3
Packing group	Ш	Ш	Ш
Environmental hazards	No.	No.	No.
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 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 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.
Additional information	-	Emergency schedules F-E, <u>S-E</u>	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Transport in bulk according to Annex II of Marpol and the IBC Code	: Not available.
ADR / RID	: Tunnel restriction code: (D/E) Hazard identification number: 30
	ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity).
IMDG	: IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 450 litre capacity).

Section 15. Regulatory information

Hazardous Substance Act B.E. 2535 (1992)				
<u>Type</u>				
Ingredient name	Туре	<u>Authority</u>	Conditions	

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other in	nfo	ormation	
History			
Date of printing	1	01.12.2020	
Date of issue/Date of revision	1	01.12.2020	
Date of previous issue	1	28.05.2020	
Version	1	1.08	
Key to abbreviations	:	ADN = European Provisions concerning the International Carriage of Dan Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Ch IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods	f
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Section 16. Other information

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations

LogPow = logarithm of the octanol/water partition coefficient

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.