SAFETY DATA SHEET



SteelMaster 120SB

Section 1. Identification		
GHS product identifier	: SteelMaster 120SB	
Other means of identification	: Not available.	
Product code	: 15400	
Product description	: Paint.	
Product type	: Liquid.	
Identified uses Use in coatings - Industrial use Use in coatings - Professional use		
Manufacturing country	 Jotun Thailand Limited 700/353 Amata Nakorn Industrial Estate (BIP 2) Moo 6, Tumbol Donhualoh, Amphur Muang Chonburi Chonburi 20000 Thailand Phone: + 66 2 022 9888 Fax: + 66 2 022 9888 , + 66 38 214 375 	

Emergency telephone number : Jotun Thailand Limited

SDSJotun@jotun.com

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	Phone: + 66 2 022 9888 ext. 2100, 2400, 2402

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 CARCINOGENICITY - Category 2 REPRODUCTIVE TOXICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
GHS label elements	
Hazard pictograms	
Signal word	: Warning.
Hazard statements	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H351 - Suspected of causing cancer. H361 - Suspected of damaging fertility or the unborn child. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	

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result in classification

Section 2. Hazards identification

Prevention	 P201 - Obtain special instructions before use. 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.
	P273 - Avoid release to the environment. P261 - Avoid breathing vapour.
Response	 P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 - Take off contaminated clothing and wash before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. 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 advice or attention.
Storage	: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + 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	:	15400
Ingredient name		

Ingredient name	%	CAS number
xylene	≥10 - <22	1330-20-7
melamine	<10	108-78-1
ethylbenzene	<10	100-41-4
1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated	≤3	68002-25-5

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.

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. ŝ, If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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 Date of issue : 17.02.2023

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Section 4. First aid measures

	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.
Ingestion	: Wash out mouth with water. Remove dentures if any. 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/effect	<u>cts</u>	acute and delayed
Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	May cause respiratory irritation.
Skin contact	1	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symptor	<u>ns</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 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 attention and special treatment needed, if necessary		
Notes to physician		In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

: Use dry chemical, CO ₂ , water spray (fog) or foam.
: Do not use water jet.
: 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. This material is harmful 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.
: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds carbonyl halides metal oxide/oxides
: 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.
: 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). Water polluting material. May be harmful to the environment if released in large quantities.	
Methods and material for conta	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 spilt 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
Conditions for safe storage, including any incompatibilities	:	information on hygiene measures. 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 oxidising 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 unlabelled 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 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	r		iate monitoring standards. Reference to nods for the determination of hazardous
Appropriate engineering controls	v c a	contaminants below any recommende	Is to keep worker exposure to airborne d or statutory limits. The engineering controls concentrations below any lower explosive
Environmental exposure controls	t c		
Individual protection measures			
Hygiene measures	e A V	eating, smoking and using the lavatory Appropriate techniques should be use	ughly after handling chemical products, before y and at the end of the working period. d to remove potentially contaminated clothing. eusing. Ensure that eyewash stations and tation location.
Eye/face protection	e C	assessment indicates this is necessar gases or dusts. If contact is possible,	21-1:2022 should be used when a risk y to avoid exposure to liquid splashes, mists, the following protection should be worn, her degree of protection: chemical splash
Skin protection			
Hand protection	t c s c s	be worn at all times when handling che his is necessary. Considering the par check during use that the gloves are s should be noted that the time to break	complying with an approved standard should emical products if a risk assessment indicates rameters specified by the glove manufacturer, till retaining their protective properties. It through for any glove material may be rers. In the case of mixtures, consisting of e of the gloves cannot be accurately

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 ISO 374-1:2016. 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: 4H, Teflon, nitrile rubber, 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	1.326 g/cm³
Solubility	1	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	1	Lowest known value: 432°C (809.6°F) (xylene).
Decomposition temperature	1	Not available.
SADT	1	Not available.
Viscosity	:	Kinematic (40°C): >20.5 mm²/s (>20.5 cSt)
Aerosol product		

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	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	 Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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	-

<u>Sensitisation</u>

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
melamine	-	Positive	-	Rat - Male	Oral: 89 mg/kg	days

Section 11. Toxicological information

Teratogenicity Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Specific target organ toxicity (repeate	<u>d exposure)</u>		· ·
Name	Category	Route of exposure	Target organs
melamine ethylbenzene	Category 2 Category 2	-	urinary organ hearing organs
Aspiration hazard		·	
Name		Result	
valene			NPD Catagory 1

Turno .	rtoodit
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
ethyldenzene	AOI INATION HAZAND - Calegoly I

Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	May cause respiratory irritation.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phys	ical,	chemical and toxicological characteristics
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing 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 effect	<u>sts</u>	
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
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

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Section 11. Toxicological information

Acute toxicity estimates Route ATE value Dermal 5304.43 mg/kg Inhalation (vapours) 70.17 mg/l

Section 12. Ecological information

Toxicity		
Product/ingredient name	Result	Species
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio
ethylbenzene	Acute LC50 13400 μg/l Fresh water Acute EC50 7700 μg/l Marine water Acute EC50 2.93 mg/l	Fish - Pimephales promelas Algae - Skeletonema costatum Daphnia

Acute LC50 4.2 mg/l

Persistence and degradability

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

Fish

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 (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 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.
	56W615.

Exposure 48 hours

96 hours

96 hours 48 hours

96 hours

Section 14 Transport information

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	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 IMO instruments	:	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.	<u>E. 2535 (1992)</u>		
<u>Type</u>			
<u>Ingredient name</u> formaldehyde	<u>Type</u> 2	<u>Authority</u> Department of Fisheries	<u>Conditions</u> In products used for fisheries and aquatic animal farming for the purpose of controlling, preventing, and destroying microorganisms, parasites, plants or other animals
formaldehyde	2	Department of Industrial Works	Except as a precursor in the manufacture of resins and except the part on responsibility of Department of fisheries
formaldehyde	4	The Food and Drug Administration	Prohibited if used as an active ingredient in
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Section 15. Regulatory information

household and public health products and if used in disinfectants and cleaning products for floors, walls, sanitary ware and other materials.

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

Section 16. Other information

<u>History</u>		
Date of printing	1	17.02.2023
Date of issue/Date of revision	:	17.02.2023
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Version	:	1.11
Key to abbreviations	:	ADN = European Provisions concerning the International Carriage of Dangerous 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 Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods 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	1	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.