SAFETY DATA SHEET



SeaQuest Endura Comp A

Section 1. Identification			
GHS product identifier	: SeaQuest Endura Comp A		
Other means of identification	: Not available.		
Product code	: 44442		
Product description	: Paint.		
Product type	: Liquid.		
Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses		
Use in coatings - Industrial use Use in coatings - Professional use			
Supplier's details	: Jotun (Singapore) Pte Ltd 37 Tuas View Crescent Singapore 637236 Phone: 6508 8288 Fax: 6265 7484 SDSJotun@jotun.com		
Emergency telephone number	: Jotun (Singapore) Pte Ltd, Tel: 6508 8288		

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 REPRODUCTIVE TOXICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger.
Hazard statements	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H318 - Causes serious eye damage. H331 - Toxic if inhaled. H335 - May cause respiratory irritation. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. (nervous system) H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements	

Section 2. Hazards identification

Prevention	:	 P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and 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. P260 - Do not breathe vapour or spray.
Response	:	 P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P340, P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	1	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.
In compliance	:	IMO Antifouling System Convention compliant AFS/CONF/26 + IMO MEPC.331(76).
Other hazards which do not result in classification	1	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	:	44442
Ingredient name		

Ingredient name	%	CAS number
xylene	≥10 - ≤19	1330-20-7
copper pyrithione	≤9.7	14915-37-8
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.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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.

Section 4. First aid measures

Section 4. First al	1 IIIEasuies
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treate promptly by a physician. 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/e	
Potential acute health effe	<u>ts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Toxic if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>toms</u>
Eye contact	: Adverse symptoms may include the following: pain 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: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations
Indication of immediate me	ical 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
See toxicological information	n (Section 11)

See toxicological information (Section 11)

Section 5. Firefighting 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 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 very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides 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	tiv	<u>e equipment and emergency procedures</u>	
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. Do not breathe 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. Collect spillage.	
Methods and material for containment 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

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. 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. 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	Exp	osure limits
xylene	(Sin PE PE PE	kplace Safety and Health Actgapore, 2/2006).L (short term): 651 mg/m³ 15 minutes.L (short term): 150 ppm 15 minutes.L (long term): 434 mg/m³ 8 hours.L (long term): 100 ppm 8 hours.
ethylbenzene	(Sin PE PE Wor (Sin PE	kplace Safety and Health Act gapore, 2/2006). Notes:L (long term): 100 ppm 8 hours.L (long term): 434 mg/m³ 8 hours.kplace Safety and Health Act gapore, 2/2006).L (short term): 543 mg/m³ 15 minutes.L (short term): 125 ppm 15 minutes.
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, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.	
Environmental exposure controls	: Emissions from ventilation or work process they comply with the requirements of enviro cases, fume scrubbers, filters or engineerir equipment will be necessary to reduce emi	onmental protection legislation. In some ng modifications to the process
ndividual protection measu		-

Section 8. Exposure controls/personal protection

oducts, before eriod. ated clothing. tions and a risk shes, mists, e worn,
shes, mists,
cal splash rator may be
e unlimited roduct. n use, to the glove ed and used sical/ hould not be .35 mm), 0.4 mm), 4H/ A) (> 0.3 mm)
ind time of
nandling this onditions of
on the task pecialist c electricity, atic es.
uld be I should be
t meets the ling to a ner important

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Red
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)

Date of issue	
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Section 9. Physical and chemical properties

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Flash point	osed cup: 33°C (91.4°F)	
Burning time	t applicable.	
Burning rate	t applicable.	
Evaporation rate	ghest known value: 0.84 (ethylbenzene) Weighted average: 0.79 tyl acetate	compared with
Flammability (solid, gas)	t applicable.	
Lower and upper explosive (flammable) limits	3 - 6.7%	
Vapour pressure	ghest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene erage: 0.98 kPa (7.35 mm Hg) (at 20°C)	e). Weighted
Vapour density	ghest known value: 3.7 (Air = 1) (xylene). Weighted average: 3	.7 (Air = 1)
Relative density	026 g/cm ³	
Solubility	oluble in the following materials: cold water and hot water.	
Solubility in water	t available.	
Partition coefficient: n- octanol/water	t available.	
Auto-ignition temperature	west known value: 432°C (809.6°F) (xylene).	
Decomposition temperature	t available.	
SADT	t available.	
Viscosity	namic: Highest known value: 0.58 cP (xylene) nematic: Highest known value: 0.77 cSt (ethylbenzene) (OECD 1 nematic (40C): >20.5 cSt	14)

Section 10. Stability and reactivity

Reactivity	: No	o specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Th	ne product is stable.
Possibility of hazardous reactions	: Ur	nder normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid		void all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, raze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials		eep away from the following materials to prevent strong exothermic reactions: kidising agents, strong alkalis, strong acids.
Hazardous decomposition products		nder normal conditions of storage and use, hazardous decomposition products nould not be produced.
SADT	: No	ot available.

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
,	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
copper pyrithione	LC50 Inhalation Dusts and mists	Rat	70 mg/m ³	4 hours
11 13	LD50 Dermal	Rabbit	300 mg/kg	-
	LD50 Oral	Rat	200 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
copper pyrithione	Eyes - Severe irritant	Mammal - species unspecified	-	-	-
	Skin - Irritant	Mammal - species unspecified	-	-	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
copper pyrithione	-	-		Mammal - species unspecified	Route of exposure unreported	-

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	• •	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
copper pyrithione	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
	Category 1 Category 2		nervous system hearing organs

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Toxic if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the physical	sical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness

Section 11. Toxicological information

		gioa momanon	
Inhalation	:	Adverse symptoms may include the for respiratory tract irritation coughing reduced foetal weight increase in foetal deaths skeletal malformations	ollowing:
Skin contact	:	Adverse symptoms may include the for pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations	ollowing:
Ingestion		Adverse symptoms may include the for stomach pains reduced foetal weight increase in foetal deaths skeletal malformations	
	<u>cts</u>	as well as chronic effects from shor	t 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	ect	<u>s</u>	
Not available.			
General	:	May cause damage to organs through	prolonged or repeated exposure.
Carcinogenicity	:	No known significant effects or critical	hazards.
Mutagenicity	:	No known significant effects or critical	hazards.
Teratogenicity	:	Suspected of damaging the unborn ch	nild.
Developmental effects	:	No known significant effects or critical	hazards.
Fertility effects	:	No known significant effects or critical	hazards.
Numerical measures of toxic	<u>ity</u> :		
Acute toxicity estimates			
Route			ATE value
Oral			2500 mg/kg
Dermal Inhalation (vapours)			2440.32 mg/kg 92.43 mg/l
Inhalation (vapours)			0.88 mg/l
· /			

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
copper pyrithione	Acute EC50 0.022 mg/l	Daphnia	48 hours
	Acute IC50 0.035 mg/l	Algae	120 hours
	Acute LC50 0.0043 mg/l	Fish	96 hours
	Chronic NOEC 0.00046 mg/l	Algae - Skeletonema costatum	120 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
,	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours

Section 12. Ecological information

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

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low

Mobility in soil

coefficient (Koc)

Soil/water partition : 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. 1 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.

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3009	UN3009	UN3009
UN proper shipping name	Copper based pesticide, liquid, toxic, flammable (copper pyrithione)	Copper based pesticide, liquid, toxic, flammable (copper pyrithione). Marine pollutant (copper pyrithione)	Copper based pesticide, liquid, toxic, flammable (copper pyrithione)
Transport hazard class(es)	6.1 (3)	6.1 (3)	6.1 (3)
Packing group	Ш	Ш	Ξ
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-E, S-D	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Additional information

Section 14. Transport information

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

ADR / RID	:	Tunnel restriction code: (D/E) Hazard identification number: 63
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 to IMO instruments	:	Not available.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

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) UN = United Nations
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.