MATERIAL SAFETY DATA SHEET

MSDS

Last changed: 11/05/2001 Internal no.: 01 Replaces date: 22/03/2000

ANTIFOULING SEAMATE SB 33

1. PRODUCT AND COMPANY

☒	Approved for use	☐	
☐	Approved for laboratory use	☐	
☐	Approved by Jotun AS	☐	

TRADE NAME	ANTIFOULING SEAMATE SB 33
APPLICATION	Antifouling paint

ART-NO	PM3283

Producer/Importer	JOTUN-HENRY CLARK LTD.
Address	Flixborough, Scunthorpe
Zipcode & City	North Lincolnshire DN15 8RR
Telephone	+44 1724 40 00 00
Fax	+44 1724 40 01 00
Contactperson	QA/Environm. dept., JOTUN A/S, NORWAY
Responsible	QA/Environm. dept., JOTUN A/S, NORWAY
Emergency number	Contact the National Poison Center

2. COMPOSITION OF PRODUCT

No	Ingredients name	CAS-NO	Cons.(weight%)		Classification
1	DICOPPER OXIDE	1317-39-1	10-25		Xn,22-36
2	TRIBUTYLTIN POLYMER	-	10-25		T,21-25-36/38-48/23/25-50/53
3	XYLENE, mixed isomers	1330-20-7	10-25		Xn,10-20/21-38
4	1-METHOXY-2-PROPANOL	107-98-2	2,5-10		10
5	AROMATIC HYDROCARBONS, C9-C12	64742-95-6	1-2,5		XnN,10-37-65-51/53
6	TRIBUTYLTIN OXIDE	56-35-9	0-1		T,21-25-36/38-48/23/25-50/53

Legend T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, IK=No classification required, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Very flammable, N=Dangerous for the environment, Muta=Mutagenic, Carc=Carcinogenic, Repr=Toxic for reproduction

INGREDIENT COMMENTS

Substances presenting a health hazard within the meaning of the current issue of the CHIP Regulations or assigned occupational exposure limits.

3. HAZARD IDENTIFICATION

Toxic

FLAMMABLE. HARMFUL BY INHALATION AND IN CONTACT WITH SKIN. TOXIC IF SWALLOWED. IRRITATING TO EYES AND SKIN. TOXIC: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION AND IF SWALLOWED.
For potential danger for the environment, see section 12.

4. FIRST AID

GENERAL
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION
Keep the patient warm in a quiet place with fresh air. If breathing has stopped, administer artificial respiration. If unconscious place in the recovery position. Seek medical advice.

SKIN CONTACT
Remove contaminated clothing. Wash skin thoroughly with soap and water or use an appropriate skin cleaner. Do NOT use solvents or thinners.

EYE CONTACT
Remove any contact lenses. Hold the eyelids apart. Irrigate copiously with clean, fresh water for at least 10 minutes. Seek medical advice if symptoms persist.

INGESTION
DO NOT INDUCE VOMITING. If accidentally swallowed obtain immediate medical attention. Keep at rest. Seek medical advice.

MEDICAL INFORMATION
Risk of chemical pneumonia by aspiration. Keep attention: danger of lung damage. General health examination. Professional evaluation of the work station.

5. FIRE FIGHTING MEASURES

PROPER FIREFIGHTING EQUIPMENT
Recommended: alcohol resistant foam, CO2, powders, water spray. Not to be used: water jet.

FIRE AND EXPLOSION HAZARDS
Fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Decomposition products may be a hazard to health.

PERSONAL PROTECTION WHEN FIREFIGHTING
The personal protective equipment required is provided in section 8. Professional fire-fighters are required to use an air-fed system when dealing with major fires.

OTHER INFORMATION
Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

OTHER INFORMATION
Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8. Place in container for disposal according to local regulations (see section 13). Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite and diatomaceous earth. Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environmental Agency.

7. HANDLING AND STORAGE

HANDLING ADVICE
Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should not be used in vicinity of open flames or other sources of ignition. Use explosion-proof electrical equipment. The product may charge electrostatically. Allways use earth

(ground) wire when transferring from one container to another. Personnel should wear anti-static clothing and footwear. Floors should be electrically conductive. Keep container tightly closed. Exclude sources of heat, sparks and open flame. Use non-sparking tools. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking are forbidden in the work area.For personal protective equipment see Section 8. Always keep in containers made of the same material as the supply container. Never use pressure to empty the container, it is not a pressure vessel. Electrical equipment should be protected to appropriate standards. The Manual Handling Operations Regulations may apply to the handling of containers of this product.

STORAGE
Store in accordance with the regulations for flammable materials. Observe the label precautions. Store in a dry, cold and well ventilated place away from sources of heat, ignition and direct sunlight. Store separately from oxidising agents and strongly alkaline and strongly acidic materials. No smoking. Containers which are opened should be properly resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Ingredients name	CAS-no	OEL value (long-term)	OEL value (short-term)	OEL
DICOPPER OXIDE	1317-39-1	1,0 mg/m3;(Cu)	2,0 mg/m3;(Cu)	
TRIBUTYLTIN POLYMER	-	0,1 mg/m3;Sk, (Sn)	0,2 mg/m3;Sk, (Sn)	
XYLENE, mixed isomers	1330-20-7	441,0 mg/m3 ;Sk	662,0 mg/m3 ;Sk	
1-METHOXY-2-PROPANOL	107-98-2	375,0 mg/m3;Sk	1120,0 mg/m3;Sk	
AROMATIC HYDROCARBONS, C9-C12	64742-95-6	125,0 mg/m3	-	
TRIBUTYLTIN OXIDE	56-35-9	0,1 mg/m3;Sk, (Sn)	0,2 mg/m3;Sk, (Sn)	

EXPOSURE CONTROL
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Spray mist contains all substances of the product and must not be inhaled. OEL's are taken from the current version of EH40 (by Health & Safety Executive, UK).

RESP. PROTECTION
Use respiratory protective mask with charcoal and dust filter (A2/P3) when spraying this product. When use of roller or brush, then charcoal filter is sufficient.

EYE PROTECTION
Eye protection designed to protect against liquid splashes should be worn.

HAND PROTECTION
Use PVA/viton gloves. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. Never apply barrier cream to contaminated skin.

SKIN PROTECTION
Wear anti-static clothing made of natural fibre or of heat resistant synthetic fibre. When spraying use suit covering the whole body.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid.		
Colour	Light red. Dark red.		
Odour	Organic solvent.		
Solubility	Organic solvent.		
Melting point/range	-	**Density**	1,77-1,79
Expl. limit LEL-UEL., %-%:	1 - 8	**Solubility in water**	
Vapor pressure		**Saturation conc.**	
Decomposition temp.		**Rel. density sat. air (air=1)**	
pH Solution		**Boiling point/range**	138 - 144ºC
Flash point	26ºC	**pH concentrate**	-
Molecular weight		**Viscosity**	
Ignition temp	270ºC	**Smelling limits lo-hi**	
Rel. vapor density (air=1)		**Rel. evap. velocity**	
Air reactive		**Water reactive**	

10. STABILITY AND REACTIVITY

STABILITY
Stable under recommended storage and handling conditions (see section 7).

MATERIALS TO AVOID
Keep away from oxidising agents, strongly alkaline and strongly acidic materials to prevent the exothermic reactions.

HAZARDOUS DECOMPOSITION PRODUCTS
In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

11. TOXICOLOGICAL INFORMATION

GENERAL
There are no toxicological data available on the product itself.

INHALATION
Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous system. Symptoms and signs include headache; dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Inhalation of smoke (from a fire or from welding on dicopper oxide coated material) may give symptoms like influenza.

SKIN CONTACT
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to the product's defatting properties.Tributyltin compounds are absorbed through the skin.

EYE CONTACT
Splashes in the eyes may cause irritation and reversible local damage. Splashes in the eyes may cause irritation and reversible damage.

INGESTION
Toxic if swallowd. Absorbed by the gastric intestinal system. May cause liver and kidney damage. Accidental ingestion may cause vomiting and abdominal pains. Risk of chemical pneumonia.

CANCER
The product contains ethylbenzene. IARC has classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

12. ECOLOGICAL INFORMATION

BREAKDOWN
Tributyltin oxide: Half-life in water 7-16 day and nights. Slow decomposition in the ground.
Aromatic hydrocarbons C9-C12: Not easily degradable.

ACCUMULATION
Aromatic hydrocarbons C9-C12: Potential to bioaccumulate.

ECOTOXITY
Aromatic hydrocarbons C9-C12: LC50 (fish) = 1-10 mg/l.
Tributyltin oxid:
Fish (rainbow trout): LC50 7,2 ug/l.
Fish (sheepshead minnow): LC50 12,5 ug/l.
Daphnia : EC50 (48h) 11,4 ug/l. EC50 (21d) 0,31 ug/l.
Growth-inhibiting was observed on oysterlarval exposed for 0,02-0,05 ug/l tributyltin.

OTHER INFORMATION
Do not discharge the product to sewer or drains.The preparation contains tributyltin compounds which present an environmental hazard. The product contains aromatic hydrocarbons C9-C12 labelled "Dangerous for the environment".

13. DISPOSAL

Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Do not allow into drains or water courses. Waste must be disposed of at approved landfill/waste storage or traement facility.

WASTEGROUP
08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVE, SEALANTS AND PRINTING INKS. 08 01 02 Waste paints and varnish free of halogenated solvents.

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14. TRANSPORT INFORMATION

PROPER SHIPPING NAME	ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE.Tributyltin compounds 10-25%)		
Toll. reg. no.			
HAZCHEM			
	ADR (Road)		
UN No.	3019	**Dang. goods**	
Class	6.1,72 c)	**Label**	6.1+3
Haz. id. no		**Marginno.**	
	RID (Railway)		
UN No.		**Dang. goods**	
Class		**Label**	
Haz..id.no			
	IMDG (Sea)		
UN No.	3019	**Dang. goods**	
Class	6.1	**Label**	6.1+3
Packaging group	III	**EmS**	6.1-01
MFAG	545	**Marine Pollutant**	PP
Sub. risk	3	**Page**	6220
	IATA (Airplane)		
UN No.	3019	**Dang. goods**	
Class	6.1	**Sub. risk**	
Label	6.1+3	**Packaging group**	II

GENERAL
Transport only in accordance with ADR for road, RID for rail, IMDG for sea transport and IATA for airtransport.

15. REGULATORY INFORMATION

Classification

Toxic

COMPOSITION
TRIBUTYLTIN POLYMER (10-25), XYLENE, mixed isomers (10-25)

R-PHRASES
R10 Flammable. R20/21 Harmful by inhalation and in contact with skin. R25 - Toxic if swallowed. R36/38 - Irritating to eyes and skin. R48/23/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation an if swallowed.

S-PHRASES
S23 Do not breathe vapour/spray. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). 96.1-Wear suitable protective clothing (coverall of contrasting colour to the product being applied, underneath a disposable coverall with hood), suitable gloves and impervious footwear that protects the lower leg.96.2-Wear suitable respiratory protective equipment such as powered filtration or airline respiratory equipment with combined protective helmet and visor when spraying.95-Not for retail sale. Not for use on vessels less than 25 meters overall length or fish/shellfish farming equipment.

REFERENCES

ANTIFOULING SEAMATE SB 33

The product is labelled for supply in accordance with the current issue of CHIP Regulations, and latest version of the approved supply list.

16. OTHER INFORMATION

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VENDOR NOTES

Not to be used on boats of an overall length less than 25 meters, or on vessels of any length for use predominantly on inland waterways and lakes, or on any appliances or equipment used in fish or shellfish farming.The use of the preparation is restricted to professional users. The information contained in this MSDS is based on the present state of knowledge and current national legislation. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are compiled with. The information in this MSDS provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. Further information and relevant advice can be found in: The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839). The Control of Substances Hazardous to Health Regulations 1988 (SI1988:1657). The Highly Flammable Liquids and liquefied Petroleum Gases Regulations 197 (SI 1972:917). The Manual Handling Operations Regulations 1992 (SI 1992:2793). Storage of Flammable Liquids in Containers, HS(G)51. Storage of Packaged Dangerous Substances, HS(G)71. The selection, use and maintenance of respiratory protective equipment: A practical guide HS(G)53.