

MATERIAL SAFETY DATA SHEET

MSDS

Last changed: 03/02/2000

Internal num.: 06

Replaces date:03/01/1996

TANKGUARD HB - COMP. A

1. PRODUCT AND COMPANY

TRADE NAME : TANKGUARD HB - COMP. A
APPLICATION : Two-pack high molecular epoxy paint.
ART-No : PM3210

PRODUCER/IMPORTER :

Company : JOTUN-HENRY CLARK LTD.
Address : Flixborough, Scunthorpe
Zip & city : North Lincolnshire DN15 8RR
Country : UK
Telephone : +44 1724 40 00 00
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Emergencyphones : Contact the National Poison Center
Contactperson : QA/Environm. dept., JOTUN A/S, NORWAY
Responsible : QA/Environm. dept., JOTUN A/S, NORWAY

2. COMPOSITION OF PRODUCT

| No | Ingredients name | CAS-NO | Weight% | | Dangerclas./Cmnt. |
|----|-------------------------------|------------|---------|---|--------------------|
| 1 | XYLENE, mixed isomers | 1330-20-7 | 10-25 | N | Xn,10-20/21-38 |
| 2 | 1-METHOXY-2-PROPANOL | 107-98-2 | 2,5-10 | N | 10 |
| 3 | N-BUTANOL | 71-36-3 | 2,5-10 | N | Xn,10-20 |
| 4 | AROMATIC HYDROCARBONS, C9-C12 | 64742-95-6 | 2,5-10 | N | XnN,10-37-65-51/53 |

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, Fo=Flammable, N=Dang. to the environment,

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



FLAMMABLE. HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
 For potential danger for the environment, see section 12.

4. FIRST AID

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. Regular medical control. Person developing a skin rash are to be directed to a dermatologist for examination.

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

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

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

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

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**

Smoking, eating and drinking are forbidden in the work area. The Manual Handling Operations Regulations may apply to the handling of containers of this product. Electrical equipment should be protected to appropriate standards. Never use pressure to empty the container, it is not a pressure vessel. Always keep in containers made of the same material as the supply container. For personal protective equipment see Section 8. Smoking, eating and drinking are forbidden in the work area. Avoid inhalation of vapour and spray mist. Avoid skin and eye contact. Use non-sparking tools. Keep container tightly closed. Exclude sources of heat, sparks and open flame. Floors should be electrically conductive. Personnel should wear anti-static clothing and footwear. Always use earth (ground) wire when transferring from one container to another. The product may charge electrostatically. Use explosion-proof electrical equipment. The product should not be used in vicinity of open flames or other sources of ignition. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors.

STORAGE

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OEL s

| Ingredients name | CAS-no | OEL value | OEL |
|-------------------------------|------------|---|--------------|
| XYLENE, mixed isomers | 1330-20-7 | 441,0 mg/m ³ ;Sk | LTEL STEL |
| 1-METHOXY-2-PROPANOL | 107-98-2 | 375,0 mg/m ³ ;Sk 1120,0 mg/m ³ ;Sk | LTEL STEL |
| N-BUTANOL | 71-36-3 | 154,0 mg/m ³ ;Sk | STEL |
| AROMATIC HYDROCARBONS, C9-C12 | 64742-95-6 | 125,0 mg/m ³ | LTEL |

RESP. PROTECTION

When use of roller or brush, then charcoal filter is sufficient. Use respiratory protective mask with charcoal and dust filter (A2/P2) when spraying this product.

EYE PROTECTION

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

HAND PROTECTION

Use PVA/EVAL 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------|-------------------------------------|----------------------|-------------|
| Form: | Liquid. | | |
| Colour: | Light green/pale green. Light grey. | | |
| Odour: | Organic solvent. | | |
| Solubility: | Organic solvent. | | |
| Melting point/range: | - | Density: | 1,51 |
| Expl. limit LEL-UEL%: | 1,0 - 11,3 - | Boiling point/range: | 118 - 177°C |
| Flash point: | 25°C | pH concentrate: | - |
| Ignition temp.: | 287°C | | |

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. The epoxy compound in this product showed no sensitization in animal experiments. Whether this compound gives allergy to humans is not known.

Nevertheless the possibility of allergy in hypersensitive persons, can not be excluded. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.

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.

SKIN CONTACT

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to the product's defatting properties.

EYE CONTACT

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

INGESTION

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

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| 12. ECOLOGICAL INFORMATION |
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BREAKDOWN

Aromatic hydrocarbons C9-C12: Not easily degradable.

ACCUMULATION

Aromatic hydrocarbons C9-C12: Potential to bioaccumulate.

ECOTOXICITY

Aromatic hydrocarbons C9-C12: LC50 (fish) = 1-10 mg/l.

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| 13. DISPOSAL |
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Waste must be disposed of at approved landfill/waste storage or treatment facility. Do not allow into drains or water courses. 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.

WASTEGROUP

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

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| 14. TRANSPORT INFORMATION |
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| | | | |
|-----------------------------|--------|-------------------|-----|
| PROPER SHIPPING NAME | PAINT | | |
| | | | |
| | | IMDG (Sea) | |
| UN No | 1263 | Class | 3.3 |
| Label | 3 | Packaging Group | III |
| EmS | 3 - 05 | MFAG | 310 |
| Page | 3372 | | |

Not ADR-restricted ref. NOTE under E of marginal 2301 (applicable to receptacles of less than 450 litres capacity). ADR for road, RID for rail, IMDG for sea transport and IATA for airtransport. Transport only in accordance with

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| 15. REGULATORY INFORMATION |
|-----------------------------------|

Classif.:

**COMPOSITION**

XYLENE, mixed isomers (10-25)

R-PHRASES

R20/21 Harmful by inhalation and in contact with skin. R10 Flammable.

S-PHRASES

S38 In case of insufficient ventilation, wear suitable respiratory equipment. S36/37 Wear suitable protective clothing and gloves. S23 Do not breathe vapour/spray.

REFERENCES

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**ISSUED:**03/02/2000**INFORMATION SOURCES:****VENDOR NOTES**

Persons with epoxy allergic reactions, should not work with this kind of products. 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 complied 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.

USER NOTES

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