

TEMADUR HB 80

Date 4.4.2008

Previous date: 7.5.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**1.1 Identification of the article**

1.1.1 Commercial Product Name
TEMADUR HB 80

1.1.2 Product code
512 -series

1.2 Use of the Substance/Preparation**1.2.1 Intended use**

Painting work.

Description: A two-component anti-corrosive pigmented gloss polyurethane paint.

1.3 Identification of the company**1.3.1 Supplier**

Tikkurila Oyj

1.3.2 Contact information:

P.O.Box P.O.Box 53
Postcode and post office FI-01301 VANTAA
FINLAND
Telephone +358 9 857 71
Telefax +358 9 8577 6936

1.3.4 Responsible for the Safety Data Sheet:

Tikkurila Oy, Product Safety, e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number**1.4.1 Telephone number, name and address**

Tikkurila Oy, Environment and Safety: +358 9 857 71

2. HAZARDS IDENTIFICATION

Flammable.

Irritant; Xi

Dangerous for the environment, N

Irritating to respiratory system. Vapours may cause drowsiness and dizziness. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information on hazard labelling in section 15.1.

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Hazardous components**

3.1.1 CAS number	EINECS	3.1.2 Chemical name of the substance	3.1.3 Concentration	3.1.4 Classification
1330-20-7	215-535-7	Xylene	5 - 10 %	Xn; R10-20/21-38
64742-95-6	265-199-0	Solvent naphtha, light aromatic	10 - 25 %	Xn, N; R10-37-65-66-67-51/53
7779-90-0	231-994-3	Zinc phosphate	1 - 5 %	N; R50/53
41556-26-7/	255-437-1/	Pentamethylpiperidyl	< 0,5 %	Xi, N; R43-50/53
82919-37-7	280-060-4	compound		
8052-41-3	232-489-3	Stoddard solvent	< 1 %	Xn, N; R10-65-66-67-51/53
123-86-4	204-658-1	Butyl acetate	0 - 2,5 %	-; R10-66-67
7429-90-5	231-072-3	Aluminium powder (stabilised)	0 - 5 %	F; R10-15
100-41-4	202-849-4	Ethylbenzene	1 - 2,5 %	F, Xn; R11-20

4. FIRST AID MEASURES**4.1 Additional advice**

In all cases of doubt, or when symptoms persist, seek medical attention.

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- 4.2 Inhalation**
Remove to fresh air, keep patient warm and at rest.
- 4.3 Skin contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleanser.
- 4.4 Eye contact**
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.
- 4.5 Ingestion**
If accidentally swallowed obtain immediate medical attention. Keep at rest. DO NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media**
Use foam, CO₂, powder or water spray.
- 5.2 Extinguishing media which must not be used for safety reasons**
Waterjet
- 5.3 Specific hazards**
Fire will produce dense black smoke, which contains decomposition products. Avoid breathing the smoke.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
Avoid breathing vapours. Exclude sources of ignition.
- 6.2 Environmental precautions**
Do not allow to enter drains or water courses.
- 6.3 Methods for cleaning up**
Contain and collect spillage with non-combustible absorbent materials, e.g. sand or vermiculite and place in a container for disposal according to local regulations. Clean preferably with a detergent; avoid the use of solvents.

7. HANDLING AND STORAGE

- 7.1 Handling**
Vapours are heavier than air and may form explosive mixtures with air. Good ventilation must be provided. Keep away from sources of ignition. Take precautionary measures against static discharges.
- 7.2 Storage**
Keep containers tightly closed. Store in a cool, dry, well ventilated place away from sources of heat and direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure Limit Values**
- 8.1.1 Occupational exposure limit values**
- | | |
|-------------------------------|----------------------------|
| Xylene | 100 ppm (8 h) |
| Butyl acetate | 150 ppm (8 h) |
| Aluminium powder (stabilised) | 10 mg/m ³ (8 h) |
| Ethylbenzene | 100 ppm (8 h) |
- 8.1.2 Information on limit values**
TLV-TWA = Threshold Limit Values - Time-weighted average / ACGIH 2007
- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
Provide adequate ventilation. Comply with the health and safety at work laws.
- 8.2.1.1 Respiratory protection**

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Use appropriate certified respirators, with gas and vapour filter A, during sanding with dust filter P2, if ventilation is insufficient. During spray-application use respirators with gas, vapour and dust filter AP. During continuous and long-term work the use of air-fed or motor-driven respirators is recommended.

8.2.1.2 Hand protection

Always wear protective gloves (e.g. nitrile rubber). Barrier creams may also help to protect the exposed areas of the skin.

8.2.1.3 Eye protection

Safety eyewear must be used, specially during spray-application.

8.2.1.4 Skin and body protection

Protective clothing must be used during spray-application.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 General Information (appearance, odour)**

Coloured, viscous liquid, strong odour.

9.2 Important Health Safety and Environmental Information

9.2.2 Boiling point/range 137 - 145 °C *)

9.2.3 Flash point 25 °C *)

9.2.5 Explosive properties

9.2.5.1 Lower explosion limit 1 vol-% *)

9.2.5.2 Upper explosion limit 7 vol-% *)

9.2.7 Vapour pressure 0,7 kPa (20 °C) *)

9.2.8 Relative density 1,29 - 1,38

9.2.9 Solubility

9.2.9.1 Water solubility Insoluble

9.2.11 Viscosity flow time more than 30 sec / ISO 3 mm cup

9.3 Other data

Evaporation rate (BuAc=1) : 0,76 *)

*) = Xylene

10. STABILITY AND REACTIVITY**10.1 Conditions to avoid**

Solvent vapours may form explosive mixtures with air.

10.2 Materials to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.3 Hazardous decomposition products

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

11. TOXICOLOGICAL INFORMATION**11.1 Acute toxicity**

See section 11.5.

11.2 Primary irritation

See section 11.5.

11.3 Sensitisation

Contains pentamethylpiperidyl compound. May produce an allergic reaction.

11.5 Human experience

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11.5.1 Inhalation: Solvent vapours and spray mist harmful if inhaled. Long term exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache and dizziness.

11.5.2 Skin contact: Repeated or prolonged contact with the preparation may cause removal of the natural fat from the skin resulting in contact dermatitis. Splashes in the eyes may cause irritation.

11.5.3 Other effects: Harmful if taken internally.

12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity****12.1.1 Aquatic toxicity**

Solvent naphtha, light aromatic: LC50 = 1-10 mg/l, fish, crustacean, algae (estimate); toxic
Zinc phosphate: LC50(fish) = 0,14-2,6 mg Zn²⁺/l; EC50(48h, daphnia magna) = 0,04-0,86 mg Zn²⁺/l, EC50 (72h, algae) = 0,136-0,150 mg Zn²⁺/l

12.3 Persistence and degradability**12.3.1 Biodegradation**

Solvent naphtha, light aromatic: 78 %, 28 d; readily biodegradable

12.4 Bioaccumulative potential

Solvent naphtha, light aromatic: octanol/water partition coefficient log Pow = 3,7-4,5 (estimate)

12.6 Other adverse effects

There is no data available on the preparation itself. The product should not be allowed to enter drains or water courses.

13. DISPOSAL CONSIDERATIONS

13.1 Product residues: Gather residues into waste containers. Destroy according to the rules given by local authorities. EWC-code for liquid waste is e.g 08 01 11 (waste paint and varnish containing organic solvents or other dangerous substances).

13.2 Packaging waste: Empty cans should be recycled or disposed of in accordance with local regulations.

14. TRANSPORT INFORMATION

14.1	UN No	1263
14.2	Packing group	III
14.3	Land transport	
14.3.1	ADR/RID Class	3
14.3.3	Description of the goods	paint
14.4	Sea transport	
14.4.1	IMDG Class	3
14.4.2	Proper shipping name	paint
14.4.3	Further Information	EmS: F-E,S-E

15. REGULATORY INFORMATION**15.1 Information on the warning label****15.1.1 Letter code of the warning symbol and indications of danger for the preparation**

Xi Irritant
N Dangerous for the environment

15.1.2 Names of the ingredients given on the warning label

Xylene
Zinc phosphate
Solvent naphtha, light aromatic

15.1.3 R-phrases(s)

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R10 Flammable.
R37 Irritating to respiratory system.
R67 Vapours may cause drowsiness and dizziness.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

15.1.4 S-phrases(s)

S23 Do not breathe vapour/spray.
S29 Do not empty into drains.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.

15.1.5 Special regulations on certain preparations

Contains pentamethylpiperidyl compound. May produce an allergic reaction.

16. OTHER INFORMATION**16.1 Full text of R-phrases referred to under sections 2 and 3**

R11 Highly flammable.
R20 Harmful by inhalation.
R10 Flammable.
R37 Irritating to respiratory system.
R67 Vapours may cause drowsiness and dizziness.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R15 Contact with water liberates extremely flammable gases.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

16.4 Additional information

The information of this MSDS is based on the present state of our knowledge and on current EC laws. It is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products' properties.

Additional information available from: Tikkurila Oy, Product Safety, P.O. Box 53, FIN-01301 VANTAA, FINLAND, Telephone +358 9 857 71, Fax +358 9 8577 6936, E-mail: productsafety@tikkurila.com

Signature

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