

TEMADUR 50

Date 5.8.2010

Previous date: 30.6.2009

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- 1.1 Identification of the article**
- 1.1.1 Commercial Product Name**
TEMADUR 50
- 1.1.2 Product code**
506 -series
- 1.2 Use of the Substance/Preparation**
- 1.2.1 Intended use**
Painting work.
Description: A two-component polyurethane paint, base part.
- 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 Oyj, Product Safety, e-mail: productsafety@tikkurila.com
- 1.4 Emergency telephone number**
- 1.4.1 Telephone number, name and address**
Tikkurila Oyj, Environment and Safety: +358 9 857 71

2. HAZARDS IDENTIFICATION

Flammable.
Harmful, Xn
Harmful by inhalation and in contact with skin. May cause sensitization by skin contact. Harmful 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		3.1.2	3.1.3	3.1.4
3.1.1		Chemical name of the substance	Concentration	Classification
CAS number	EINECS			
1330-20-7	215-535-7	Xylene	12,5 - 20 %	Xn; R10-20/21-38
100-41-4	202-849-4	Ethylbenzene	1 - 5 %	F, Xn; R11-20
64742-95-6	265-199-0	Solvent naphtha, light aromatic	10 - 20 %	Xn, N; R10-37-65-66-67-51/53
64742-94-5	265-198-5	Solvent naphtha, heavy aromatic	< 1 %	Xn, N; R65-66-67-51/53
64742-82-1	265-185-4	Naphtha, hydrodesulfurized heavy	0 - 2,5 %	Xn, N; R10-65-66-67-51/53
41556-26-7/ 82919-37-7	255-437-1/ 280-060-4	Pentamethylpiperidyl compound	< 0,5 %	Xi, N; R43-50/53
7429-90-5	231-072-3	Aluminium powder (stabilised)	0 - 5 %	F; R10-15
-	-	Polyacrylate	25 - 50 %	Xi; R43

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3.1.7 Further information

Solvent naphtha, light aromatic, Solvent naphtha, heavy aromatic and Naphtha, hydrodesulfurized heavy contains benzene less than 0,1 w-%.

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

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

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)

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Ethylbenzene 100 ppm (8 h)
Aluminium powder (stabilised) 1 mg/m³ (8 h)

8.1.2 Information on limit values

TLV-TWA = Threshold Limit Values - Time-weighted average / ACGIH 2009

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

If ventilation is insufficient, use appropriate certified respirators with gas, vapour and dust filter AP. During spray-application or during continuous and long-term work, an air-fed protective respiratory equipment must be worn even when good ventilation is provided.

8.2.1.2 Hand protection

Always wear approved protective gloves (e.g. nitrile rubber) against chemicals. 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

Use suitable protective clothing.

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** 1,2 - 1,5**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**

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See section 11.5.

11.2 Primary irritation

See section 11.5.

11.3 Sensitisation

May cause sensitization by skin contact.

11.5 Human experience

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

Solvent naphtha, heavy aromatic: LL50 = 18 mg/l, rainbow trout, 96 h; harmful

Naphtha, hydrodesulfurized heavy: LC50 = 1-100 mg/l (estimate); toxic

Piperidyl compound: LC50 = 0,97 mg/l, fish, 96 h; very toxic. LC50 = 7,9 mg/l, oncorhynchus mykiss, 96 h; toxic. EC50 = 20 mg/l, daphnia magna, 24 h.

12.3 Persistence and degradability**12.3.1 Biodegradation**

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

Solvent naphtha, heavy aromatic: 58 %, 28 d; inherently biodegradable

Naphtha, hydrodesulfurized heavy: 75 %, 28 d; readily biodegradable

Piperidyl compound: Partially but not readily biodegradable.

12.4 Bioaccumulative potential

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

Solvent naphtha, heavy aromatic: octanol/water partition coefficient log Kow = 3,3-4,9

Naphtha, hydrodesulfurized heavy: octanol/water partition coefficient log Kow = 2-7

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
14.3.4	Further Information	Drums/vessels < 450 litres: not subject to ADR because of high viscosity

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14.4	Sea transport	
14.4.1	IMDG Class	3
14.4.2	Proper shipping name	paint
	Marine pollutant	no
14.4.3	Further Information	EmS: F-E,S-E Drums/vessels < 30 litres: Transport in accordance with paragraph 2.3.2.5 of the IMDG Code.
14.5	Air transport	
14.5.1	ICAO/IATA Class	3
14.5.2	Proper shipping name	paint

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	
	Xn	Harmful
15.1.2	Names of the ingredients given on the warning label	
	Xylene	
	Solvent naphtha, light aromatic	
	Polyacrylate	
15.1.3	R-phrase(s)	
	R10	Flammable.
	R20/21	Harmful by inhalation and in contact with skin.
	R43	May cause sensitization by skin contact.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
15.1.4	S-phrase(s)	
	S23	Do not breathe vapour/spray.
	S24	Avoid contact with skin.
	S29	Do not empty into drains.
	S36/37	Wear suitable protective clothing and gloves.
	S38	In case of insufficient ventilation, wear suitable respiratory equipment.

16. OTHER INFORMATION

16.1	Full text of R-phrases referred to under sections 2 and 3	
	R11	Highly flammable.
	R20	Harmful by inhalation.
	R38	Irritating to skin.
	R10	Flammable.
	R20/21	Harmful by inhalation and in contact with skin.
	R43	May cause sensitization by skin contact.
	R15	Contact with water liberates extremely flammable gases.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R37	Irritating to respiratory system.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R51/53	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.
	R67	Vapours may cause drowsiness and dizziness.

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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 Oyj, 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

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