

**TEMAFLOOR 401 epoxy varnish and 4000 ESD epoxy screed**

Date 25.5.2010

Previous date: 8.6.2009

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****1.1 Identification of the article****1.1.1 Commercial Product Name**

TEMAFLOOR 401 epoxy varnish and 4000 ESD epoxy screed

**1.1.2 Product code**

008 4002

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

Painting work.

Description: 2-component, solvent free epoxy grinding screed lacquer, 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**

Irritant; Xi

Dangerous for the environment, N

Irritating to eyes and skin. May cause sensitization by skin contact. 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**

100-51-6

202-859-9

Benzyl alcohol

1 - 5 %

Xn; R20/22

25068-38-6

500-033-5

Epoxy resin (mw &lt; 700)

75 - 100 %

Xi, N; R36/38-43-51/53

64742-95-6

265-199-0

Solvent naphtha, light aromatic

&lt; 0,5 %

Xn, N; R10-37-65-66-67-51/53

68609-97-2

271-846-8

Glycidyl ether

10 - 20 %

Xi, R38-43

8052-41-3

232-489-3

Stoddard solvent

&lt; 0,5 %

Xn, N; R10-65-66-67-51/53

41556-26-7 /

255-437-1 /

Pentamethylpiperidyl sebacate

1 - 2,5 %

Xi, N; R43-50/53

82919-37-7

280-060-4

**3.1.7 Further information**

Solvent naphtha, light aromatic and stoddard solvent: contains benzene less than 0,1 w-%.

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**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, CO<sub>2</sub>, 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 skin contact with the product.
- 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**  
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**  
Stoddard solvent 100 ppm (8 h)
- 8.1.2 Information on limit values**  
TLV-TWA = Threshold Limit Values - Time-weighted average / ACGIH 2009
- 8.2 Exposure controls**

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**8.2.1 Occupational exposure controls**

Provide adequate ventilation. Skin contact with the preparation should be avoided, when handling products, which contain epoxy resin. Comply with the health and safety at work laws.

**8.2.1.1 Respiratory protection**

Use appropriate certified respirators, with gas and vapour filter A, during sanding with dust filter P2, if ventilation is insufficient.

**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 the mixing of the components.

**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**

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**9.2.3 Flash point**

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**9.2.5 Explosive properties****9.2.5.1 Lower explosion limit**

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**9.2.5.2 Upper explosion limit**

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**9.2.7 Vapour pressure**

-

**9.2.8 Relative density**

1,1

**9.2.9 Solubility****9.2.9.1 Water solubility**

Insoluble

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

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**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**

Exposure by inhalation and skin contact may cause sensitization. Based on the properties of the epoxy constituents and considering toxicological data on similar preparations, this preparation may be a skin and respiratory sensitizer and an irritant. It contains low molecular epoxy constituents which are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies.

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**11.5 Human experience**

11.5.1 Inhalation: Long term exposure causes irritation of respiratory system and mucous membranes of nose and throat.

11.5.2 Skin contact: Splashes may cause skin and eye irritation.

11.5.3 Other effects: Harmful if taken internally.

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

Epoxy resin (mw < 700): LC50 = 1,5-7,7 mg/l, onchorynchus mykiss; toxic. EC50 = 1,0 mg/l, daphnia magna; toxic. IC50 = 18 mg/l, green algae (selenastrum capricornutum), 72 h; harmful

Solvent naphtha, light aromatic: LC50 = 1-10 mg/l, fish, crustacean, algae (estimate); toxic

**12.3 Persistence and degradability****12.3.1 Biodegradation**

Epoxy resin (mw < 700): 2-3 %, 28 d, OECD 301D

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

**12.4 Bioaccumulative potential**

Epoxy resin (mw < 700): octanol/water partition coefficient log Pow = 2,8-4

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). The ready for use mixture of paint and hardener generates much heat. Allow the remainder of the mixture to harden in a safe place, e.g. in the open.

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

**14. TRANSPORT INFORMATION**

<b>14.1</b>	<b>UN No</b>	3082
<b>14.2</b>	<b>Packing group</b>	III
<b>14.3</b>	<b>Land transport</b>	
<b>14.3.1</b>	<b>ADR/RID Class</b>	9
<b>14.3.3</b>	<b>Description of the goods</b>	environmentally hazardous substance, liquid, N.O.S. (epoxy resin)
<b>14.4</b>	<b>Sea transport</b>	
<b>14.4.1</b>	<b>IMDG Class</b>	9
<b>14.4.2</b>	<b>Proper shipping name</b>	environmentally hazardous substance, liquid, N.O.S. (epoxy resin)
	<b>Marine pollutant</b>	yes
<b>14.4.3</b>	<b>Further Information</b>	EmS: F-A,S-F
<b>14.5</b>	<b>Air transport</b>	
<b>14.5.1</b>	<b>ICAO/IATA Class</b>	9
<b>14.5.2</b>	<b>Proper shipping name</b>	environmentally hazardous substance, liquid, N.O.S. (epoxy resin)

**15. REGULATORY INFORMATION**

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**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**

Epoxy resin (mw < 700)  
Glycidyl ether

**15.1.3 R-phrases**

R36/38 Irritating to eyes and skin.  
R43 May cause sensitization by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**15.1.4 S-phrases**

S24 Avoid contact with skin.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S29 Do not empty into drains.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S51 Use only in well-ventilated areas.

**15.1.5 Special regulations on certain preparations**

Contains epoxy constituents. See information supplied by the manufacturer.

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

R20/22 Harmful by inhalation and if swallowed.  
R10 Flammable.  
R37 Irritating to respiratory system.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R36/38 Irritating to eyes and skin.  
R43 May cause sensitization by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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

**Signature**

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