

**TEMACOAT SPA 50**

Date 25.6.2013

Previous date: 28.11.2012

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier**
- 1.1.1 Commercial Product Name**  
TEMACOAT SPA 50
- 1.1.2 Product code**  
158 -series
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
- 1.2.1 Recommended use**  
Painting work.  
Description: A two-component epoxy paint, base part.
- 1.3 Details of the supplier of the safety data sheet**
- 1.3.1 Supplier**  
Tikkurila Oyj
- 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 (Mon-Fri 8-16 Finnish time)

**2. HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture**  
**67/548/EEC - 1999/45/EC**  
Xn; R10-20/21-36/38-43-52/53
- 2.2 Label elements**  
**67/548/EEC - 1999/45/EC**
- Xn Harmful
- R-phrase(s)**
- R10 Flammable.
- R20/21 Harmful by inhalation and in contact with skin.
- R36/38 Irritating to eyes and skin.
- R43 May cause sensitization by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S-phrase(s)**
- S23 Do not breathe vapour/spray.
- S24 Avoid contact with skin.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37 Wear suitable protective clothing and gloves.
- S38 In case of insufficient ventilation, wear suitable respiratory equipment.
- S29 Do not empty into drains.
- Contains:**  
Xylene, epoxy resin (mw < 700) and epoxy resin (mw 700-1000)
- Special regulations on certain preparations**  
Contains epoxy constituents. See information supplied by the manufacturer.



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- 2.3 Other hazards**  
Other hazards are not known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>3.2 Mixtures</b>				
<b>Hazardous components</b>				
<b>CAS/ REACH</b>	<b>EINECS</b>	<b>Chemical name of the substance</b>	<b>Concentration</b>	<b>Classification</b>
25036-25-3	-	Epoxy resin (mw 700-1000)	10 - 20 %	Xi; R36/38-43 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317
1330-20-7/ 01- 2119486136-34	215-535-7	Xylene	5 - 10 %	Xn; R10-20/21-38 Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315
25068-38-6/ 01- 2119456619-26	500-033-5	Epoxy resin (mw < 700)	5 - 10 %	Xi, N; R36/38-43-51/53 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
107-98-2/ 01- 2119457435-35	203-539-1	1-Methoxy-2-propanol	1 - 5 %	-; R10-67 Flam. Liq. 3, H226 STOT SE 3, H336
100-41-4/ 01- 2119489370-35	202-849-4	Ethylbenzene	1 - 5 %	F, Xn; R11-20 Flam. Liq. 2, H225 Acute Tox. 4, H332
68002-19-7	-	Ureaformaldehyde resin, butylated	1 - 5 %	-; R53 Aquatic Chronic 4, H413
1330-20-7	215-535-7	Xylene	1 - 5 %	Xn; R10-20/21-36/37/38-65 Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304
7779-90-0/ 01- 2119485044-40	231-994-3	Zinc phosphate	0,25 - 1 %	N; R50/53 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

- 3.3 Other information**  
See Section 16 for full text of R-phrases and H-statements.

**4. FIRST AID MEASURES**

- 4.1 Description of first aid measures**  
In all cases of doubt, or when symptoms persist, seek medical attention.
- 4.1.2 Inhalation**  
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Seek medical attention.
- 4.1.3 Skin contact**  
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.

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- 4.1.4 Eye contact**  
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 15 minutes and seek medical advice if necessary.
- 4.1.5 Ingestion**  
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
- 4.2 Most important symptoms and effects, both acute and delayed**  
Harmful by inhalation and in contact with skin. Irritating to eyes and skin. May cause sensitization by skin contact. Inhalation of vapours may cause dizziness, headache and nausea.
- 4.3 Indication of immediate medical attention and special treatment needed**  
None.

**5. FIREFIGHTING MEASURES**

- 5.1 Extinguishing media**
- 5.1.1 Suitable extinguishing media**  
Recommended: Alcohol resistant foam, CO<sub>2</sub>, powders or water spray/mist.
- 5.1.2 Extinguishing media which must not be used for safety reasons**  
Do not use strong water jets.
- 5.2 Special hazards arising from the substance or mixture**  
The product is classified: Flammable.  
Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.
- 5.3 Advice for firefighters**  
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**

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Avoid skin contact with the product. Refer to protective measures listed in sections 7 and 8.
- 6.2 Environmental precautions**  
Do not allow to enter drains or water courses.
- 6.3 Methods and materials for containment and 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.
- 6.4 Reference to other sections**  
See also Section 13 for waste disposal instructions.

**7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Vapours are heavier than air and 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 only be used in areas from which all naked lights and other sources of ignition have been excluded. Isolate from sources of heat, sparks and open flame. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. No sparking tools should be used. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Avoid inhalation of dust from sanding. Smoking, eating and drinking should be prohibited in application area.
- 7.2 Conditions for safe storage, including any incompatibilities**

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Store in a cool, dry, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition. No smoking. Keep away from oxidising agents, from strongly alkaline and strongly acid materials. Keep container tightly closed.

**7.3 Specific end use(s)**

None.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.1 Occupational exposure limit values**

Xylene (EU)	50 ppm (8 h) Skin	100 ppm (15 min)
Ethylbenzene (EU)	100 ppm (8 h) Skin	200 ppm (15 min)
1-Methoxy-2-propanol (EU)	100 ppm (8 h) Skin	150 ppm (15 min)
Xylene (TLV)	100 ppm (8 h)	150 ppm (15 min)
Ethylbenzene (TLV)	100 ppm (8 h)	125 ppm (15 min)
1-Methoxy-2-propanol (TLV)	100 ppm (8 h)	150 ppm (15 min)

**8.1.2 Other information on limit values**

EU = Occupational Exposure Limit Values according to EU Directives 1998/24/EC, 2000/39/EC, 2006/15/EC, 2009/161/EU.

Skin = A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin.

TLV = Threshold Limit Values according to ACGIH 2009 (American Conference of Governmental Industrial Hygienists)

**8.2 Exposure controls****8.2.1 Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

The product contains epoxy constituents. Skin contact with the product and exposure to spray mist and vapour should be avoided.

**8.2.2 Individual protection measures****8.2.2.1 Respiratory protection**

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 A/P3. During continuous and long-term work the use of motor-driven or air-fed respirators is recommended.

**8.2.2.2 Hand protection**

Always wear approved protective gloves against chemicals.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Recommended protective glove type is e.g.: nitrile rubber (splash protection),

butyl rubber (splash protection),

laminated foil (breakthrough time > 480 min.)

PVC or natural rubber gloves are not recommended.

**8.2.2.3 Eye/face protection**

Use safety eyewear designed to protect against splash of liquids.

**8.2.2.4 Skin protection**

Personnel should wear protective clothing.

When necessary, wear anti-static protective clothing made of natural fibre or of high temperature resistant synthetic fibre.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>9.1</b>	<b>Important Health Safety and Environmental Information</b>	
<b>9.1.1</b>	<b>Appearance</b>	
	Coloured, viscous liquid, strong odour.	
<b>9.1.6</b>	<b>Initial boiling point and boiling range</b>	137 - 145 °C *)
<b>9.1.7</b>	<b>Flash point</b>	+ 25 °C *)
<b>9.1.10</b>	<b>Explosive properties</b>	
<b>9.1.10.1</b>	<b>Lower explosion limit</b>	1,0 vol-% *)
<b>9.1.10.2</b>	<b>Upper explosion limit</b>	7,0 vol-% *)
<b>9.1.11</b>	<b>Vapour pressure</b>	0,7 kPa (20 °C) *)
<b>9.1.13</b>	<b>Relative density</b>	1,5 - 1,6
<b>9.1.14</b>	<b>Solubility(ies)</b>	
<b>9.1.14.1</b>	<b>Water solubility</b>	Insoluble
<b>9.1.16</b>	<b>Auto-ignition temperature</b>	465 °C *)
<b>9.2</b>	<b>Other information</b>	
	Evaporation rate (BuAc=1) : 0,76 *)	
	*) = Xylene	

**10. STABILITY AND REACTIVITY**

<b>10.1</b>	<b>Reactivity</b>	
	See section 10.5.	
<b>10.2</b>	<b>Chemical stability</b>	
	Stable under recommended storage and handling conditions (see section 7).	
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	
	See section 10.5.	
<b>10.4</b>	<b>Conditions to avoid</b>	
	In confined or poorly ventilated spaces solvent vapours may form explosive mixtures with air. When exposed to high temperatures may produce hazardous decomposition products.	
<b>10.5</b>	<b>Incompatible materials</b>	
	Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.	
<b>10.6</b>	<b>Hazardous decomposition products</b>	
	Hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc. may produce when exposed to high temperatures.	

**11. TOXICOLOGICAL INFORMATION**

<b>11.1</b>	<b>Information on toxicological effects</b>	
	There are no toxicological test data available on the product itself.	
<b>11.1.1</b>	<b>Acute toxicity</b>	
	Harmful by inhalation and in contact with skin.	
<b>11.1.2</b>	<b>Irritation and corrosion</b>	
	Irritating to eyes and skin.	
<b>11.1.3</b>	<b>Sensitisation</b>	
	Based on the properties of the epoxy constituents and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies.	

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**11.1.8 Other information on acute toxicity**

**Inhalation:** Long term exposure to spray mist or solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver 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 contact with the preparation causes removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Splashed in the eyes cause eye irritation.

**Ingestion:** Ingestion may cause nausea, diarrhoea and vomiting.

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

Epoxy resin (mw < 700): LC50 = 3,1 mg/l, Pimephales promelas; toxic. EC50 = 1,4 - 1,7 mg/l, Daphnia magna; toxic. IC50 > 42,6 mg/l, bacteria, growth inhibition, 18 h; harmful  
Zinc phosphate: EC50(72h, algae) = 0,136 mg Zn2+/l.

**12.2 Persistence and degradability****12.2.1 Biodegradation**

Epoxy resin (mw < 700): 12 %, 28 d, OECD 302B; not readily biodegradable.

**12.3 Bioaccumulative potential**

Epoxy resin (mw < 700): octanol/water partition coefficient log Pow = 3,7 - 3,9.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

No data available.

**12.6 Other adverse effects**

The product is classified as environmentally hazardous. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****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).

**Packaging waste:**

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

**14. TRANSPORT INFORMATION**

**14.1 UN number** 1263

**14.2 UN proper shipping name** paint

**14.3 Transport hazard class(es)** 3

**14.4 Packing group** III

**14.5 Environmental hazards**

The product is not classified as environmentally hazardous according to international transport regulations.

**14.6 Special precautions for users**

None known.

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**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

None known.

**14.8 Further Information****Road transport:**

Drums/vessels &lt; 450 litres are not subject to ADR because of high viscosity.

**Sea transport:**

Drums/vessels &lt; 30 litres: Transport in accordance with paragraph 2.3.2.5 of the IMDG Code.

EmS: F-E,S-E

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

None known.

**15.2 Chemical safety assessment**

Has not been performed.

**16. OTHER INFORMATION****16.1 Additions, Deletions, Revisions**

See section: 3.2

**16.5 Full text of R-phrases and/or Hazard statements (H-statements) referred to under sections 2 and 3**

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36/38	Irritating to eyes and 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.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

**16.8 Additional information**

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This Safety Data Sheet is prepared in accordance with Annex II (EU) No 453/2010 to Regulation (EC) No 1907/2006 (REACH).

The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It 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.

Additional information available from:

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**Signature**

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