



SAFETY DATA SHEET

TEMAFLOOR AC601 CLEAR

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : TEMA FLOOR AC601 CLEAR
Product code : 0016090
Product description : A two-component solvent-free acrylic lacquer.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Painting work

1.3 Details of the supplier of the safety data sheet

Manufacturer or Distributor

Tikkurila Oyj
P.O. Box 53
FI-01301 VANTAA
FINLAND
Telephone +358 20 191 2000

e-mail address of person responsible for this SDS : Tikkurila Oyj,
Product Safety,
e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number

Telephone number : 112
(24h)

Supplier or Manufacturer

Telephone number : Tikkurila Oyj
+358 20 191 2000
(Mon-Fri 8-16 Finnish time)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Flam. Liq. 2, H225
Acute Tox. 4, H302
Skin Irrit. 2, H315
Eye Irrit. 2, H319
Skin Sens. 1, H317
STOT SE 3, H335

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Directive 1999/45/EC [DPD]



The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F; R11
Xi; R37/38
R43

Physical/chemical hazards : Highly flammable.

Human health hazards : Irritating to respiratory system and skin. May cause sensitization by skin contact.

2.2 Label elements

Hazard pictograms	:	 
Signal word	:	Danger
Hazard statements	:	H225 - Highly flammable liquid and vapor. H302 - Harmful if swallowed. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.
Precautionary statements		
General	:	Not applicable.
Prevention	:	P280 - Wear protective gloves/protective clothing/eye protection/face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
Response	:	P305 - IF IN EYES: P351 - Rinse cautiously with water for several minutes. P338 - Remove contact lenses, if present and easy to do. Continue rinsing. P303 - IF ON SKIN (or hair): P361 - Take off immediately all contaminated clothing. P353 - Rinse skin with water or shower. P312 - Call a POISON CENTER or doctor if you feel unwell.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Hazardous ingredients	:	methyl methacrylate dibutyl maleate N,N-Bis(2-hydroxypropyl)-p-toluidine
Supplemental label elements	:	Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification		Notes
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	≥60 - <100	F; R11 Xi; R37/38 R43	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	D
dibutyl maleate	REACH #: 01-2119523581-45 EC: 203-328-4 CAS: 105-76-0	≥3 - <7	Xn; R48/22 R43	Skin Sens. 1, H317 STOT RE 2, H373	-
N,N-Bis(2-hydroxypropyl)-p-toluidine	EC: 254-075-1 CAS: 38668-48-3	≥1 - <5	T; R25 Xi; R41 R52/53	Acute Tox. 2, H300 Eye Dam. 1, H318 Aquatic Chronic 3, H412	-
oxybenzone	REACH #: 01-2119976330-39 EC: 205-031-5 CAS: 131-57-7	≥1 - <5	N; R51/53	Aquatic Chronic 2, H411	-
			See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.

SECTION 4: First aid measures

4.1 Description of first aid measures

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|---------------------|---|--|
| General | : | In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible. |
| Eye contact | : | Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur. |
| Inhalation | : | Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. |
| Skin contact | : | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Get medical attention if symptoms occur. |
| Ingestion | : | If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting. |

4.2 Most important symptoms and effects, both acute and delayed

- Harmful if swallowed.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.
- May cause an allergic skin reaction.
- Inhalation of vapours may cause dizziness, headache and nausea.
- See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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|---------------------------------------|---|---|
| Suitable extinguishing media | : | Recommended: Alcohol resistant foam, CO ₂ , powders or water spray/mist. |
| Unsuitable extinguishing media | : | Do not use a direct water jet that could spread the fire. |

5.2 Special hazards arising from the substance or mixture

- | | | |
|---|---|---|
| Hazards from the substance or mixture | : | Highly flammable liquid and vapor. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. |
| Hazardous thermal decomposition products | : | When exposed to high temperatures, may produce hazardous decomposition products, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc. |

5.3 Advice for firefighters

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|---|---|---|
| Special protective actions for fire-fighters | : | Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Do not release runoff from fire to drains or watercourses. |
|---|---|---|

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid direct skin contact with product. Avoid breathing vapor or mist. Provide adequate ventilation. See Section 8 for information on appropriate personal protective equipment.
- 6.2 Environmental precautions** : Do not allow to enter drains, water courses or soil.
- 6.3 Methods and materials for containment and cleaning up** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Preferably clean with a detergent. Avoid using solvents.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. Isolate from sources of heat, sparks and open flame. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. No sparking tools should be used.
Avoid contact with skin and eyes. Avoid breathing vapor. Avoid inhalation of dust from sanding. Wear appropriate respirator when ventilation is inadequate. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product.
- 7.2 Conditions for safe storage, including any incompatibilities** : Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). No smoking. Store and use away from heat, sparks, open flame or any other ignition source. Fill the container by approximately 90 % only as oxygen (air) is required for stabilisation. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Recommended storage temperature is +5°C ...+25°C. Store in accordance with local regulations.
- 7.3 Specific end use(s)** : None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
methyl methacrylate	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof ventilation equipment. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn (see Personal protection for both components). Comply with the health and safety at work laws.

Individual protection measures

- | | |
|-------------------------------|--|
| Eye/face protection | : Use safety eyewear designed to protect against splash of liquids (EN166). |
| Hand protection | : Always wear approved protective gloves against chemicals. 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: 1 - 4 hours (breakthrough time): butyl rubber (0,7 mm) (EN374)
< 1 hour (breakthrough time): neoprene |
| Skin protection | : Personnel should wear protective clothing. On handling of larger quantities also face shield, chemical-resistant boots, safety apron. This product is classified as flammable. If necessary, personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers. |
| Respiratory protection | : If ventilation is inadequate, use respirator that will protect against organic vapor and dust/mist. Wear a half mask or full face respirator with gas and vapor filter A and dust filter P2 during sanding (EN140:1998, EN405:2001). During continuous and long-term work the use of motor-driven or air-fed respirators is recommended (EN12941:1998). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- | | |
|---|---|
| Physical state | : Liquid. |
| Color | : Blue. |
| Odor | : Ester-like. |
| Odor threshold | : Not relevant for the hazard assessment of the product. |
| pH | : Not relevant for the hazard assessment of the product. |
| Melting point/freezing point | : -48°C (methyl methacrylate) |
| Initial boiling point and boiling range | : 100,36°C (methyl methacrylate) |
| Flash point | : 10°C (methyl methacrylate) |
| Evaporation rate | : Not relevant due to the nature of the product. |
| Flammability (solid, gas) | : Not applicable. Product is a liquid. |
| Upper/lower flammability or explosive limits | : Lower: 1,7% (methyl methacrylate)
Upper: 12,5% (methyl methacrylate) |
| Vapor pressure | : 3,7 kPa [room temperature] (methyl methacrylate) |
| Vapor density | : 3,5 (methyl methacrylate) |
| Density | : 1 g/cm ³ |
| Solubility(ies) | : ca. 20 g/l (20°C) (water) |
| Partition coefficient: n-octanol/ water | : Not available. |
| Auto-ignition temperature | : 400°C (methyl methacrylate) |
| Decomposition temperature | : Not relevant for the hazard assessment of the product. |
| Viscosity | : Not relevant for the hazard assessment of the product. |
| Explosive properties | : No explosive ingredients present. |

Oxidizing properties : No oxidizing ingredients present.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : See Section 10.5.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : May present an explosion hazard when material is suspended in air in confined areas or equipment and subjected to spark, heat or flame. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances or heavy metal ions.
- 10.4 Conditions to avoid** : Avoid extreme heat and freezing. Avoid all possible sources of ignition (spark or flame). If the permissible storage period or storage temperature is exceeded, the product may polymerize with heat evolution.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:
 peroxides
 reducing agents
 oxidizing agents
 strong acids
 strong alkalis
 amines
 heavy metals
- 10.6 Hazardous decomposition products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no testdata available on the product itself.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Long term exposure to product vapors may result in adverse health effect such as mucous membrane and respiratory system irritation. Symptoms and signs include headache and dizziness. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
N,N-Bis(2-hydroxypropyl)-p-toluidine	LD50 Oral	Rat	25 mg/kg	-

Harmful if swallowed.

Irritation/Corrosion

Causes skin irritation. Causes serious eye irritation.

Sensitization

May cause an allergic skin reaction.

Mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity (single exposure)

May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Not classified.

Aspiration hazard

Not classified.

SECTION 12: Ecological information

Ecological testing has not been conducted on this product.

Do not allow to enter drains, water courses or soil.

The product is not classified as environmentally hazardous according to Regulation (EC) 1272/2008.

12.1 Toxicity : No specific data.

12.2 Persistence and degradability : No specific data.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	Bioconcentration factor [BCF]	Potential
dibutyl maleate	3,39	81,34	low
oxybenzone	3,79	39 to 160	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : Not available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Methods of disposal : Gather residues into waste containers. Liquid residue and cleaning liquids are hazardous waste and must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : Empty packaging should be recycled or disposed of in accordance with national regulations.

Special precautions : **Note!** 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.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN1866	UN1866	UN1866
14.2 UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	Resin solution
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.
Additional information	<u>Hazard identification number</u> 33 <u>Special provisions</u> 640D <u>Tunnel code</u> (D/E)	<u>Emergency schedules (EmS)</u> F-E, _S-E_	<u>Passenger and Cargo Aircraft</u> Quantity limitation: 5 L Packaging instructions: 353 <u>Cargo Aircraft Only</u> Quantity limitation: 60 L Packaging instructions: 364 <u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 1 L Packaging instructions: Y341 <u>Special provisions</u> A3

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Other EU regulations

Europe inventory : Not determined.

VOC Directive : This product is in scope of Directive 2004/42/CE.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

	Classification	Justification
	Flam. Liq. 2, H225	Expert judgment
	Acute Tox. 4, H302	Expert judgment
	Skin Irrit. 2, H315	Expert judgment
	Eye Irrit. 2, H319	Expert judgment
	Skin Sens. 1, H317	Expert judgment
	STOT SE 3, H335	Expert judgment
Full text of abbreviated H statements	: H225 Highly flammable liquid and vapor. H300 Fatal if swallowed. H302 Harmful if swallowed. (oral) H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.	
Full text of classifications [CLP/GHS]	: Acute Tox. 2, H300 Acute Tox. 4, H302 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT RE 2, H373 STOT SE 3, H335	ACUTE TOXICITY (oral) - Category 2 ACUTE TOXICITY (oral) - Category 4 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Full text of abbreviated R phrases	: R11- Highly flammable. R25- Toxic if swallowed. R48/22- Harmful: danger of serious damage to health by prolonged exposure if swallowed. R41- Risk of serious damage to eyes. R37/38- Irritating to respiratory system 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. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Full text of classifications [DSD/DPD]	: F - Highly flammable T - Toxic Xn - Harmful Xi - Irritant N - Dangerous for the environment	

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Notice to reader

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.