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 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:
Tikkurila Oyj
Telephone number: +358 20 191 2000 (GMT +2) Mon-Fri 8-16

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
Skin Sens. 1, H317
STOT SE 3, H335
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

2.2 Label elements
Hazard pictograms:

Signal word: Danger
Hazard statements:
- H225 - Highly flammable liquid and vapor.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H335 - May cause respiratory irritation.

Precautionary statements:

**General**
- Not applicable.

**Prevention**
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P261 - Avoid breathing vapor.
- P280 - Wear protective gloves/clothing and eye/face protection.
- P284 - In case of inadequate ventilation wear respiratory protection.

**Response**
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P333 + P313 - If skin irritation or rash occurs, seek medical advice/attention.

**Storage**
- Not applicable.

**Disposal**
- Not applicable.

Hazardous ingredients:
- Methyl methacrylate
- Dibutyl maleate
- 1,4-butandiol dimethacrylate
- 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.

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**SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutyl maleate</td>
<td>REACH #: 01-2119523581-45 EC: 203-328-4 CAS: 105-76-0</td>
<td>&lt;10</td>
<td>Skin Sens. 1, H317 STOT RE 2, H373</td>
</tr>
<tr>
<td>1,4-Butanediol dimethacrylate</td>
<td>REACH #: 01-2119967415-30 EC: 218-218-1 CAS: 2082-81-7</td>
<td>&lt;10</td>
<td>Skin Sens. 2, H317</td>
</tr>
<tr>
<td>N,N-Bis(2-hydroxypropyl)-p-toluidine</td>
<td>REACH #: 01-2119980937-17 EC: 254-075-1 CAS: 30858-48-3</td>
<td>&lt;2.5</td>
<td>Acute Tox. 2, H300 Eye Irrit. 2, H319 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>(2-hydroxy-4-methoxyphenyl) phenylmethanone</td>
<td>REACH #: 01-2119976330-39 EC: 205-031-5 CAS: 131-57-7</td>
<td>&lt;2.5</td>
<td>Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.</td>
</tr>
</tbody>
</table>

Notes:
- D

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.
SECTION 4: First aid measures

4.1 Description of first aid measures

General: Take off immediately all contaminated clothing. 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.
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

Suitable extinguishing media: Recommended: Alcohol resistant foam, CO₂ or powders.

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 combustion products: When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

5.3 Advice for firefighters

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. Provide adequate ventilation. Avoid breathing vapor or mist. Avoid direct skin contact with product. 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 where 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEL: 100 ppm 15 minutes.</td>
</tr>
</tbody>
</table>

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 glove material (EN374): < 1 hour (breakthrough time): nitrile rubber
  1 - 4 hours (breakthrough time): butyl rubber
  > 8 hours (breakthrough time): laminated foil
  Not recommended: PVC or natural rubber (latex) gloves

Skin protection : Wear suitable 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 : Strong.
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 metacrylate)
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 : ca. 40 hPa (20 °C)
Vapor density : 3.5 (methyl methacrylate)
Density : 1 g/cm³
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
- strong acids
- strong alkalis
- amines

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 test data 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Bis(2-hydroxypropyl)-p-toluidine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>25 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Harmful if swallowed.
Irritation/Corrosion
Causes skin 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>Bioconcentration factor [BCF]</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2-hydroxy-4-methoxyphenyl) phenylmethanone</td>
<td>3.79</td>
<td>39 to 160</td>
<td>low</td>
</tr>
<tr>
<td>dibutyl maleate</td>
<td>3.39</td>
<td>1.91</td>
<td>low</td>
</tr>
<tr>
<td>methyl methacrylate</td>
<td>1.38</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

### 12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): 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)

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Waste designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 01 11*</td>
<td>waste paint and varnish containing organic solvents or other hazardous substances</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1 UN number</strong></td>
<td>UN1866</td>
<td>UN1866</td>
<td>UN1866</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>RESIN SOLUTION</td>
<td>RESIN SOLUTION</td>
<td>Resin solution</td>
</tr>
<tr>
<td><strong>14.3 Transport hazard class(es)</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td><strong>14.4 Packing group</strong></td>
<td>II</td>
<td>II</td>
<td>II</td>
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<tr>
<td><strong>14.5 Environmental hazards</strong></td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Limited quantity</strong></td>
<td>5 L</td>
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<tr>
<td><strong>Special provisions</strong></td>
<td>640D</td>
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<td></td>
</tr>
<tr>
<td><strong>Tunnel code</strong></td>
<td>(D/E)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 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]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2, H225</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements:
- H225: Highly flammable liquid and vapor.
- H300: Fatal if swallowed.
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H400: Very toxic to aquatic life.
- 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 TOXICITY (oral) - Category 2
- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Aquatic Acute 1, H400: AQUATIC HAZARD (ACUTE) - Category 1
- Aquatic Chronic 2, H411: AQUATIC HAZARD (LONG-TERM) - Category 2
- Aquatic Chronic 3, H412: AQUATIC HAZARD (LONG-TERM) - Category 3
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317: SKIN SENSITIZATION - Category 1
- Skin Sens. 1B, H317: SKIN SENSITIZATION - Category 1B
- STOT RE 2, H373: SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
- STOT SE 3, H335: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Date of issue/ Date of revision: 1/25/2018
Date of previous issue: 12/8/2016
Version: 3

Notice to reader:
This Safety Data Sheet is prepared in accordance with Annex II (EU) No 830/2015 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.