



# SAFETY DATA SHEET

TEMANYL GF RETARDER

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

### 1.1 Product identifier

Product name : TEMANYL GF RETARDER

Product description : Inhibitor.

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

Recommended use: Painting

### 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 (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  
Skin Corr. 1B, H314  
Skin Sens. 1, H317  
STOT SE 3, H335  
Aquatic Chronic 3, H412

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

### 2.2 Label elements

Hazard pictograms :



Signal word : Danger

<b>Hazard statements</b>	: H225 - Highly flammable liquid and vapour. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H412 - Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	
<b>General</b>	: Not applicable.
<b>Prevention</b>	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing mist/vapours/spray. P273 - Avoid release to the environment. P280 - Wear protective gloves/clothing and eye/face protection. P284 - In case of inadequate ventilation wear respiratory protection.
<b>Response</b>	: P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or physician.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Hazardous ingredients</b>	: methyl methacrylate 4-tert-butylpyrocatechol
<b>Supplemental label elements</b>	: 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 Regulation (EC) No. 1272/2008 [CLP]	Notes
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	≥75 - ≤90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	D
4-tert-butylpyrocatechol	EC: 202-653-9 CAS: 98-29-3	≥10 - <25	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411  <b>See Section 16 for the full text of the H statements declared above.</b>	-

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

- 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 20 minutes. Get medical attention immediately. Continue rinsing until medical attention can be obtained.
- 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 recognised skin cleanser. Do NOT use solvents or thinners. In case of chemical burns, get medical attention as soon as possible.
- 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

- Causes severe skin burns and eye damage.  
 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** : \*\*\*TO BE TRANSLATED\*\*\*
- 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 vapour. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. The vapour/gas is heavier than air and will spread along the ground. Vapours 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. This material is hazardous to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- 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. Do not breathe vapour or mist. Do not get in eyes or on skin. Put on appropriate personal protective equipment (see Section 8).
- 6.2 Environmental precautions** : Hazardous to aquatic environment. Do not allow to enter drains, water courses or soil.
- 6.3 Methods and material 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** : Vapours are heavier than air and may spread along floors. Vapours 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.  
Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid inhalation of dust from sanding. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. Avoid release to the environment.
- 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). Store and use away from heat, sparks, open flame or any other ignition source. No smoking. 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 unlabelled 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
methly methacrylate	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 416 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 208 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.

**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). Provide a readily-accessible eyewash facility. Comply with the health and safety at work laws.

### Individual protection measures

**Eye/face protection** : Wear eye/face protection (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 fibres or of high-temperature-resistant synthetic fibres.

**Respiratory protection** : If ventilation is inadequate, use respirator that will protect against organic vapour and dust/mist. During spray-application use respirators with combination filter A/P3. Wear a half mask or full face respirator with gas and vapour filter A and with 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.

**Environmental exposure controls** : For information regarding environmental protection measures, please refer to section 13 for waste handling, section 7 for handling and storage and section 1.2 for relevant identified uses of the substance or mixture and uses advised against.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Colourless.
<b>Odour</b>	: Strong.
<b>Odour threshold</b>	: Not relevant for the hazard assessment of the product.
<b>pH</b>	: Not relevant for the hazard assessment of the product.
<b>Melting point/freezing point</b>	: -48°C (methyl methacrylate)
<b>Initial boiling point and boiling range</b>	: 100.36°C (methyl methacrylate)
<b>Flash point</b>	: 10 °C (methyl methacrylate)
<b>Evaporation rate</b>	: Not relevant due to the nature of the product.
<b>Flammability (solid, gas)</b>	: Not applicable. Product is a liquid.

Upper/lower flammability or explosive limits	: Lower: 1.7% (methyl methacrylate) Upper: 12.5% (methyl methacrylate)
Vapour pressure	: 3.7 kPa [room temperature] (methyl methacrylate)
Vapour density	: 3.5 (methyl methacrylate)
Density	: 1 g/cm <sup>3</sup>
Solubility(ies)	: insoluble in 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.
Oxidising properties	: No oxidising 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 testdata available on the product itself.

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

Long term exposure causes irritation of respiratory system and mucous membranes of nose and throat. 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. Exposure to component solvent vapor concentrations 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 the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Prolonged contact can cause severe irritation or even burns. The liquid splashed in the eyes may cause irreversible damage.

#### Acute toxicity

Not classified.

**Irritation/Corrosion**

Causes severe skin burns and eye damage.

**Sensitisation**

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 classified as hazardous according to Regulation (EC) 1272/2008 as amended.  
Harmful to aquatic life with long lasting effects.

**12.1 Toxicity** : No specific data.

Not available.

**12.2 Persistence and degradability** : No specific data.**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	Bioconcentration factor [BCF]	Potential
4-tert-butylpyrocatechol	1.98	-	low
methyl methacrylate	1.38	-	low

**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**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**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 hazardous 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** : None.

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN3469	UN3469	UN3469
<b>14.2 UN proper shipping name</b>	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	Paint related material, flammable, corrosive
<b>14.3 Transport hazard class(es)</b>	3 (8)	3 (8)	3 (8)
<b>14.4 Packing group</b>	II	II	II
<b>14.5 Environmental hazards</b>	No.	No.	No.

#### Additional information

**ADR/RID** : **Hazard identification number** 338  
**Limited quantity** 1 L  
**Special provisions** 163, 367  
**Tunnel code** (D/E)

**IMDG** : **Emergency schedules** F-E, S-C  
**Special provisions** 163, 367

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 1 L.. Packaging instructions: 352. Cargo Aircraft Only: 5 L.. Packaging instructions: 363. Limited Quantities - Passenger Aircraft: 0.5 L.. Packaging instructions: Y340.  
**Special provisions** A3, A72, A192, A803

**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 IMO instruments** : 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 : All components are listed or exempted.

National regulations

**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		On basis of test data
Skin Corr. 1B, H314		Calculation method
Skin Sens. 1, H317		Calculation method
STOT SE 3, H335		Calculation method
Aquatic Chronic 3, H412		Calculation method
<b>Full text of abbreviated H statements</b>	: H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.	
<b>Full text of classifications [CLP/GHS]</b>	: Acute Tox. 4, H302 Acute Tox. 4, H312 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Flam. Liq. 2, H225 Skin Corr. 1B, H314 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

Date of issue/ Date of revision : 12/4/2020

Date of previous issue : No previous validation

Version : 1

**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.