SAFETY DATA SHEET
THINNER 006 1025

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

1.1 Product identifier
   Product name : THINNER 006 1025
   Product description : Thinner.

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 (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. 3, H226
   Skin Irrit. 2, H315
   Eye Dam. 1, H318
   STOT SE 3, H335
   STOT SE 3, H336
   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:
- H226 - Flammable liquid and vapor.
- H318 - Causes serious eye damage.
- H315 - Causes skin irritation.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.

Precautionary statements:

General:
- Not applicable.

Prevention:
- P210 - Keep away from sparks and open flames. - No smoking.
- P261 - Avoid breathing mist/vapors/spray.
- P280 - Wear protective gloves and eye or face protection.
- P284 - In case of inadequate ventilation wear respiratory protection.

Response:
- 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.

Storage:
- Not applicable.

Disposal:
- Not applicable.

Hazardous ingredients:
- 2-butoxyethanol
  - REACH #: 01-2119475108-36
  - EC: 203-905-0
  - CAS: 111-76-2
  - Index: 603-014-00-0
  - ≥10 - ≤25
  - Class: Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
- 2-methoxy-1-methylethyl acetate
  - REACH #: 01-2119475791-29
  - EC: 203-603-9
  - CAS: 108-65-6
  - Index: 607-195-00-7
  - ≥10 - ≤25
  - Class: Flam. Liq. 3, H226
- 2-methoxyethanol
  - REACH #: 01-2119484609-23
  - EC: 201-148-0
  - CAS: 78-83-1
  - Index: 603-108-00-1
  - ≥25 - ≤50
  - Class: Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336
- 2-butoxyethanol
  - REACH #: 01-2119475108-36
  - EC: 203-905-0
  - CAS: 111-76-2
  - Index: 603-014-00-0
  - ≥10 - ≤25
  - Class: Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
- ethanol
  - REACH #: 01-2119457610-43
  - EC: 200-578-6
  - CAS: 64-17-5
  - Index: 603-002-00-5
  - ≥10 - ≤25
  - Class: Flam. Liq. 2, H225

For see Section 16 for the full text of the H statements declared above.
SECTION 4: First aid measures

4.1 Description of first aid measures

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 20 minutes. Get medical attention immediately.

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 immediately.

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.

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 serious eye damage.
Causes skin irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
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: Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO₂, 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: 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 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. 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). Store and use away from heat, sparks, open flame or any other ignition source. No smoking. 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>EU OEL (Europe, 12/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 98 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>STEL: 50 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 246 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>EU OEL (Europe, 12/2017). Absorbed through skin. 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>TWA: 275 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>
STEL: 100 ppm 15 minutes.
STEL: 550 mg/m³ 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 vapors 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:
Wear protective gloves. 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): butyl rubber
- > 8 hours (breakthrough time): laminated foil
Not recommended: PVC or natural rubber (latex) gloves

Skin protection:
Wear suitable protective clothing. 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. During spray-application use respirators with combination filter A/P3 (EN405:2001). 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: Clear.
- 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: <-90°C (iso-butanol)
- Initial boiling point and boiling range: 108°C (iso-butanol)
- Flash point: Closed cup: 23°C
- Evaporation rate: 0.64 (butyl acetate = 1) (iso-butanol)
- Flammability (solid, gas): Not applicable. Product is a liquid.
- Upper/lower flammability or explosive limits:
  - Lower: 1.7% (iso-butanol)
  - Upper: 10.9% (iso-butanol)
- Vapor pressure: 1.6 kPa [room temperature] (iso-butanol)
Vapor density: 2.55 (iso-butanol)
Density: 0.89 g/cm³
Solubility(ies): insoluble in water.
Partition coefficient: n-octanol/water:
Auto-ignition temperature: 415°C (iso-butanol)
Decomposition temperature:
Viscosity:
Explosive properties:
Oxidizing properties:

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.

10.4 Conditions to avoid:
Avoid extreme heat and freezing. Avoid all possible sources of ignition (spark or flame).

10.5 Incompatible materials:
Keep away from the following materials to prevent strong exothermic reactions:
oxidizing agents
strong acids
strong alkalis

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.
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. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

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>2-butoxyethanol</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat - Female</td>
<td>2.2 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Guinea pig</td>
<td>230 uL/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>917 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Not classified.
Irritation/Corrosion
Causes skin irritation. Causes serious eye damage.

Sensitization
Not classified.
Mutagenicity
Not classified.
Carcinogenicity
Not classified.
Reproductive toxicity
Not classified.
Teratogenicity
Not classified.
Specific target organ toxicity (single exposure)
May cause respiratory irritation. May cause drowsiness or dizziness.
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\textsubscript{ow}</th>
<th>Bioconcentration factor [BCF]</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>-0.35</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>1.2</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>0.81</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>iso-butanol</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 **Mobility in soil**

Soil/water partition coefficient (K\textsubscript{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)

<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: None.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th></th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN number</td>
<td>UN1263</td>
<td>UN1263</td>
<td>UN1263</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>PAINT RELATED MATERIAL</td>
<td>PAINT RELATED MATERIAL</td>
<td>PAINT RELATED MATERIAL</td>
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<tr>
<td>14.3 Transport hazard class(es)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Additional information

ADR/RID: Tunnel code (D/E)
IMDG: Emergency schedules F-E,S-E

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: All components are listed or exempted.

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. 3, H226</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3, H336</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements:
- H225: Highly flammable liquid and vapor.
- H226: Flammable liquid and vapor.
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.

Full text of classifications [CLP/GHS]:
- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY (dermal) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Eye Dam. 1, H318: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2
- Flam. Liq. 3, H226: FLAMMABLE LIQUIDS - Category 3
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- STOT SE 3, H335: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
- STOT SE 3, H336: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Date of issue/ Date of revision: 9/10/2018
Date of previous issue: 11/23/2015
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.