

# SAFETY DATA SHEET



HOLZSTAUBBINDEMITTEL 0340-00

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

### 1.1 Product identifier

**Product name** : HOLZSTAUBBINDEMITTEL 0340-00

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

**Product use** : Paint.

### 1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

**e-mail address of person responsible for this SDS** : Prod-safe@teknos.com

#### National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : In an emergency, call 112

## 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

Eye Irrit. 2, H319

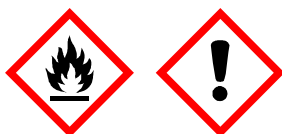
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H225 - Highly flammable liquid and vapour.  
H319 - Causes serious eye irritation.

#### Precautionary statements

**Prevention** : P280 - Wear eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**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.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## SECTION 2: Hazards identification

Supplemental label elements :

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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	Specific Conc. Limits, M-factors and ATEs	Type
Ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥50 - ≤75	Flam. Liq. 2, H225 Eye Irrit. 2, H319	-	[1]
Butanone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	-	[1] [2]
acetone	REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≤5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	EUH066: C ≥ 25%	[1] [2]
Dipropyleneglycolmethylether	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤5	Not classified.	-	[2]
ethyl (S) -2-hydroxypropionate	EC: 211-694-1 CAS: 687-47-8 Index: 607-129-00-7	<3	Flam. Liq. 3, H226 Eye Dam. 1, H318 STOT SE 3, H335 <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

## SECTION 5: Firefighting measures

**Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

### 6.4 Reference to other sections

: See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

## SECTION 7: Handling and storage

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### Seveso Directive - Reporting thresholds

#### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Ethanol	<b>Regulation on Limit Values - MAC (Austria, 4/2021).</b> TWA: 1000 ppm 8 hours. TWA: 1900 mg/m <sup>3</sup> 8 hours. CEIL: 2000 ppm, 3 times per shift, 60 minutes. CEIL: 3800 mg/m <sup>3</sup> , 3 times per shift, 60 minutes.
Butanone	<b>Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin.</b> TWA: 100 ppm 8 hours. TWA: 295 mg/m <sup>3</sup> 8 hours. PEAK: 200 ppm, 4 times per shift, 30 minutes. PEAK: 590 mg/m <sup>3</sup> , 4 times per shift, 30 minutes.
acetone	<b>Regulation on Limit Values - MAC (Austria, 4/2021).</b> TWA: 500 ppm 8 hours. TWA: 1200 mg/m <sup>3</sup> 8 hours. PEAK: 2000 ppm, 4 times per shift, 15 minutes. PEAK: 4800 mg/m <sup>3</sup> , 4 times per shift, 15 minutes.
Dipropyleneglycolmethylether	<b>Regulation on Limit Values - MAC (Austria, 4/2021).</b>

## SECTION 8: Exposure controls/personal protection

<p>No exposure limit value known.</p>	<p><b>[Dipropylene glycol monomethyl ethers (mixture of isomers)]</b>  <b>Absorbed through skin.</b>  TWA: 50 ppm 8 hours.  TWA: 307 mg/m<sup>3</sup> 8 hours.  CEIL: 100 ppm, 8 times per shift, 5 minutes.  CEIL: 614 mg/m<sup>3</sup>, 8 times per shift, 5 minutes.</p>
<p>Ethanol</p>	<p><b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021).</b></p>
<p>Butanone</p>	<p>Limit value 8 hours: 1000 mg/m<sup>3</sup> 8 hours.  <b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021).</b></p>
<p>acetone</p>	<p>Limit value 8 hours: 590 mg/m<sup>3</sup> 8 hours.  Limit value 15 min: 885 mg/m<sup>3</sup> 15 minutes.  <b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021).</b></p>
<p>Dipropyleneglycolmethylether</p>	<p>Limit value 8 hours: 600 mg/m<sup>3</sup> 8 hours.  Limit value 15 min: 1400 mg/m<sup>3</sup> 15 minutes.  <b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). [2-(Methoxymethyletoxy)propanol] Absorbed through skin.</b></p>
<p>No exposure limit value known.</p>	<p>Limit value 8 hours: 308 mg/m<sup>3</sup> 8 hours.  Limit value 8 hours: 50 ppm 8 hours.</p>
<p>No exposure limit value known.</p>	<p><b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022).</b></p>
<p>Ethanol</p>	<p>TWA: 1000 mg/m<sup>3</sup> 8 hours.  TWA: 522 ppm 8 hours.  STEL: 3000 mg/m<sup>3</sup> 15 minutes.  STEL: 1566 ppm 15 minutes.</p>
<p>Butanone</p>	<p><b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022).</b></p>
<p>acetone</p>	<p>TWA: 600 mg/m<sup>3</sup> 8 hours.  TWA: 200.4 ppm 8 hours.  STEL: 900 mg/m<sup>3</sup> 15 minutes.  STEL: 300.6 ppm 15 minutes.</p>
<p>Dipropyleneglycolmethylether</p>	<p><b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022).</b></p>
<p>No exposure limit value known.</p>	<p>TWA: 800 mg/m<sup>3</sup> 8 hours.  STEL: 1500 mg/m<sup>3</sup> 15 minutes.  STEL: 621 ppm 15 minutes.  TWA: 331.2 ppm 8 hours.  <b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). [(2-methoxymethylethoxy)-propanol (mixture of isomers)] Absorbed through skin.</b></p>
<p>Ethanol</p>	<p>TWA: 270 mg/m<sup>3</sup> 8 hours.  TWA: 43.74 ppm 8 hours.  STEL: 550 mg/m<sup>3</sup> 15 minutes.  STEL: 89.1 ppm 15 minutes.</p>
<p>Butanone</p>	<p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022).</b></p>
<p>No exposure limit value known.</p>	<p>TWA: 1000 mg/m<sup>3</sup> 8 hours.  TWA: 500 ppm 8 hours.  STEL: 1900 mg/m<sup>3</sup> 15 minutes.  STEL: 1000 ppm 15 minutes.</p>
<p>Ethanol</p>	<p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022).</b></p>
<p>Butanone</p>	<p>TWA: 600 mg/m<sup>3</sup> 8 hours.  TWA: 200 ppm 8 hours.  STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>

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acetone	<p>STEL: 300 ppm 15 minutes.</p> <p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022).</b></p> <p>TWA: 1210 mg/m<sup>3</sup> 8 hours.</p> <p>TWA: 500 ppm 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022).</b> [Dipropylene glycol monomethyl ether] Absorbed through skin.</p> <p>TWA: 308 mg/m<sup>3</sup> 8 hours.</p> <p>TWA: 50 ppm 8 hours.</p>
Butanone	<p><b>EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values</b></p> <p>TWA: 200 ppm 8 hours.</p> <p>TWA: 600 mg/m<sup>3</sup> 8 hours.</p> <p>STEL: 300 ppm 15 minutes.</p> <p>STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values</b></p> <p>TWA: 500 ppm 8 hours.</p> <p>TWA: 1210 mg/m<sup>3</sup> 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>EU OEL (Europe, 1/2022).</b> [(2-Methoxymethylethoxy)-propanol] Absorbed through skin. Notes: list of indicative occupational exposure limit values</p> <p>TWA: 50 ppm 8 hours.</p> <p>TWA: 308 mg/m<sup>3</sup> 8 hours.</p>
Ethanol	<p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).</b></p> <p>TWA: 1000 ppm 8 hours.</p> <p>TWA: 1900 mg/m<sup>3</sup> 8 hours.</p> <p>STEL: 1300 ppm 15 minutes.</p> <p>STEL: 2500 mg/m<sup>3</sup> 15 minutes.</p>
Butanone	<p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).</b> Absorbed through skin.</p> <p>STEL: 100 ppm 15 minutes.</p> <p>STEL: 300 mg/m<sup>3</sup> 15 minutes.</p> <p>TWA: 60 mg/m<sup>3</sup> 8 hours.</p> <p>TWA: 20 ppm 8 hours.</p>
acetone	<p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).</b></p> <p>TWA: 500 ppm 8 hours.</p> <p>TWA: 1200 mg/m<sup>3</sup> 8 hours.</p> <p>STEL: 630 ppm 15 minutes.</p> <p>STEL: 1500 mg/m<sup>3</sup> 15 minutes.</p>
Dipropyleneglycolmethylether	<p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).</b> [(2-Methoxymethylethoxy)propanol] Absorbed through skin.</p> <p>TWA: 50 ppm 8 hours.</p> <p>TWA: 310 mg/m<sup>3</sup> 8 hours.</p>
ethyl (S)-2-hydroxypropionate	<p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).</b> [Ethyl lactate]</p> <p>TWA: 5 ppm 8 hours.</p> <p>TWA: 25 mg/m<sup>3</sup> 8 hours.</p> <p>STEL: 10 ppm 15 minutes.</p> <p>STEL: 49 mg/m<sup>3</sup> 15 minutes.</p>
No exposure limit value known.	
Ethanol	<p><b>TRGS 900 OEL (Germany, 6/2022).</b></p> <p>TWA: 380 mg/m<sup>3</sup> 8 hours.</p> <p>PEAK: 1520 mg/m<sup>3</sup> 15 minutes.</p> <p>TWA: 200 ppm 8 hours.</p> <p>PEAK: 800 ppm 15 minutes.</p> <p><b>DFG MAC-values list (Germany, 7/2022).</b></p> <p>TWA: 200 ppm 8 hours.</p> <p>PEAK: 800 ppm, 4 times per shift, 15 minutes.</p>

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Butanone	<p>TWA: 380 mg/m<sup>3</sup> 8 hours. PEAK: 1520 mg/m<sup>3</sup>, 4 times per shift, 15 minutes. <b>TRGS 900 OEL (Germany, 6/2022). Absorbed through skin.</b> TWA: 600 mg/m<sup>3</sup> 8 hours. PEAK: 600 mg/m<sup>3</sup> 15 minutes. TWA: 200 ppm 8 hours. PEAK: 200 ppm 15 minutes. <b>DFG MAC-values list (Germany, 7/2022). Absorbed through skin.</b> TWA: 200 ppm 8 hours. PEAK: 200 ppm, 4 times per shift, 15 minutes. TWA: 600 mg/m<sup>3</sup> 8 hours. PEAK: 600 mg/m<sup>3</sup>, 4 times per shift, 15 minutes.</p>
acetone	<p><b>TRGS 900 OEL (Germany, 6/2022).</b> TWA: 1200 mg/m<sup>3</sup> 8 hours. PEAK: 2400 mg/m<sup>3</sup> 15 minutes. TWA: 500 ppm 8 hours. PEAK: 1000 ppm 15 minutes. <b>DFG MAC-values list (Germany, 7/2022).</b> TWA: 500 ppm 8 hours. PEAK: 1000 ppm, 4 times per shift, 15 minutes. TWA: 1200 mg/m<sup>3</sup> 8 hours. PEAK: 2400 mg/m<sup>3</sup>, 4 times per shift, 15 minutes.</p>
Dipropyleneglycolmethylether	<p><b>TRGS 900 OEL (Germany, 6/2022). [(2-Methoxymethylethoxy)propanol]</b> TWA: 310 mg/m<sup>3</sup> 8 hours. PEAK: 310 mg/m<sup>3</sup> 15 minutes. TWA: 50 ppm 8 hours. PEAK: 50 ppm 15 minutes. <b>DFG MAC-values list (Germany, 7/2022). [Dipropylene glycol monomethyl ether (mixture of isomers)]</b> TWA: 50 ppm 8 hours. PEAK: 50 ppm, 4 times per shift, 15 minutes. TWA: 310 mg/m<sup>3</sup> 8 hours. PEAK: 310 mg/m<sup>3</sup>, 4 times per shift, 15 minutes.</p>
Ethanol	<p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021).</b> TWA: 1000 ppm 8 hours. TWA: 1900 mg/m<sup>3</sup> 8 hours.</p>
Butanone	<p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021).</b> TWA: 200 ppm 8 hours. TWA: 600 mg/m<sup>3</sup> 8 hours. STEL: 300 ppm 15 minutes. STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021).</b> TWA: 1780 mg/m<sup>3</sup> 8 hours. STEL: 3560 mg/m<sup>3</sup> 15 minutes.</p>
Dipropyleneglycolmethylether	<p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). [(2-Methoxymethylethoxy)propanol]</b> <b>Absorbed through skin.</b> TWA: 100 ppm 8 hours. TWA: 600 mg/m<sup>3</sup> 8 hours. STEL: 150 ppm 15 minutes. STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>
Ethanol	<p><b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022).</b> TWA: 1900 mg/m<sup>3</sup> 8 hours. PEAK: 3800 mg/m<sup>3</sup> 15 minutes. PEAK: 2000 ppm 15 minutes. TWA: 1000 ppm 8 hours.</p>
Butanone	<p><b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). Absorbed through skin. Skin sensitiser. Inhalation sensitiser.</b> TWA: 600 mg/m<sup>3</sup> 8 hours.</p>



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acetone	<p>PEAK: 900 mg/m<sup>3</sup> 15 minutes.  PEAK: 300 ppm 15 minutes.  TWA: 200 ppm 8 hours.  <b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). Skin sensitiser. Inhalation sensitiser.</b>  TWA: 1210 mg/m<sup>3</sup> 8 hours.  TWA: 500 ppm 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [Dipropylene glycol monomethyl ether]</b>  TWA: 308 mg/m<sup>3</sup> 8 hours.  TWA: 50 ppm 8 hours.</p>
Ethanol	<p><b>Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021).</b>  TWA: 1900 mg/m<sup>3</sup> 8 hours.  TWA: 1000 ppm 8 hours.</p>
Butanone	<p><b>Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Absorbed through skin.</b>  STEL: 900 mg/m<sup>3</sup> 15 minutes.  STEL: 300 ppm 15 minutes.  TWA: 145 mg/m<sup>3</sup> 8 hours.  TWA: 50 ppm 8 hours.</p>
acetone	<p><b>Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021).</b>  TWA: 600 mg/m<sup>3</sup> 8 hours.  TWA: 250 ppm 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). [dipropylene glycol methyl ether] Absorbed through skin.</b>  TWA: 300 mg/m<sup>3</sup> 8 hours.  TWA: 50 ppm 8 hours.</p>
Ethanol	<p><b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b>  OELV-15min: 1000 ppm 15 minutes.</p>
Butanone	<p><b>NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values</b>  OELV-8hr: 200 ppm 8 hours.  OELV-8hr: 600 mg/m<sup>3</sup> 8 hours.  OELV-15min: 300 ppm 15 minutes.  OELV-15min: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>NAOSH (Ireland, 5/2021). Notes: EU derived Occupational Exposure Limit Values</b>  OELV-8hr: 500 ppm 8 hours.  OELV-8hr: 1210 mg/m<sup>3</sup> 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>NAOSH (Ireland, 5/2021). [(2-methoxymethylethoxy)-1-propanol] Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values</b>  OELV-8hr: 50 ppm 8 hours.  OELV-8hr: 308 mg/m<sup>3</sup> 8 hours.</p>
Butanone	<p><b>Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020).</b>  8 hours: 200 ppm 8 hours.  8 hours: 600 mg/m<sup>3</sup> 8 hours.  Short Term: 300 ppm 15 minutes.  Short Term: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020).</b>  8 hours: 500 ppm 8 hours.  8 hours: 1210 mg/m<sup>3</sup> 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020). Absorbed through skin.</b>  8 hours: 50 ppm 8 hours.  8 hours: 308 mg/m<sup>3</sup> 8 hours.</p>
No exposure limit value known.	
No exposure limit value known.	

## SECTION 8: Exposure controls/personal protection

No exposure limit value known.	
Butanone	<p><b>EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values</b>  TWA: 200 ppm 8 hours.  TWA: 600 mg/m<sup>3</sup> 8 hours.  STEL: 300 ppm 15 minutes.  STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values</b>  TWA: 500 ppm 8 hours.  TWA: 1210 mg/m<sup>3</sup> 8 hours.</p>
Dipropyleneglycolmethylether	<p><b>EU OEL (Europe, 1/2022). [(2-Methoxymethylethoxy)-propanol] Absorbed through skin. Notes: list of indicative occupational exposure limit values</b>  TWA: 50 ppm 8 hours.  TWA: 308 mg/m<sup>3</sup> 8 hours.</p>
Ethanol	<p><b>Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). Absorbed through skin.</b>  OEL, 8-h TWA: 260 mg/m<sup>3</sup> 8 hours.  STEL, 15-min: 1900 mg/m<sup>3</sup> 15 minutes.  STEL, 15-min: 1000 ppm 15 minutes.  OEL, 8-h TWA: 137 ppm 8 hours.</p>
Butanone	<p><b>Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). Absorbed through skin.</b>  OEL, 8-h TWA: 590 mg/m<sup>3</sup> 8 hours.  STEL, 15-min: 900 mg/m<sup>3</sup> 15 minutes.  OEL, 8-h TWA: 197 ppm 8 hours.  STEL, 15-min: 300 ppm 15 minutes.</p>
acetone	<p><b>Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022).</b>  STEL, 15-min: 2420 mg/m<sup>3</sup> 15 minutes.  OEL, 8-h TWA: 1210 mg/m<sup>3</sup> 8 hours.  OEL, 8-h TWA: 500 ppm 8 hours.  STEL, 15-min: 1000 ppm 15 minutes.</p>
Dipropyleneglycolmethylether	<p><b>Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). [dipropylene glycolmethylether]</b>  OEL, 8-h TWA: 300 mg/m<sup>3</sup> 8 hours.  OEL, 8-h TWA: 48.7 ppm 8 hours.</p>
No exposure limit value known.	
Ethanol	<p><b>Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021).</b>  TWA: 1900 mg/m<sup>3</sup> 8 hours.</p>
Butanone	<p><b>Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). Absorbed through skin.</b>  TWA: 450 mg/m<sup>3</sup> 8 hours.  STEL: 900 mg/m<sup>3</sup> 15 minutes.</p>
acetone	<p><b>Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021).</b>  TWA: 600 mg/m<sup>3</sup> 8 hours.  STEL: 1800 mg/m<sup>3</sup> 15 minutes.</p>
Dipropyleneglycolmethylether	<p><b>Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the</b></p>

## SECTION 8: Exposure controls/personal protection

<p>No exposure limit value known. No exposure limit value known.</p>	<p>work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [dipropylene glycol methyl ether] Absorbed through skin. TWA: 240 mg/m<sup>3</sup> 8 hours. STEL: 480 mg/m<sup>3</sup> 15 minutes.</p>
<p>Ethanol</p>	<p><b>Government regulation SR c. 355/2006 (Slovakia, 9/2020).</b> TWA: 960 mg/m<sup>3</sup> 8 hours. TWA: 500 ppm 8 hours. STEL: 1920 mg/m<sup>3</sup> 15 minutes. STEL: 1000 ppm 15 minutes.</p>
<p>Butanone</p>	<p><b>Government regulation SR c. 355/2006 (Slovakia, 9/2020).</b> TWA: 600 mg/m<sup>3</sup> 8 hours. TWA: 200 ppm 8 hours. STEL: 900 mg/m<sup>3</sup> 15 minutes. STEL: 300 ppm 15 minutes.</p>
<p>acetone</p>	<p><b>Government regulation SR c. 355/2006 (Slovakia, 9/2020).</b> TWA: 1210 mg/m<sup>3</sup> 8 hours. TWA: 500 ppm 8 hours.</p>
<p>Dipropyleneglycolmethylether</p> <p>No exposure limit value known. No exposure limit value known. No exposure limit value known.</p>	<p><b>Government regulation SR c. 355/2006 (Slovakia, 9/2020).</b> TWA: 308 mg/m<sup>3</sup>, (2-methoxymetyl-ethoxypropanol) 8 hours. TWA: 50 ppm, (2-methoxymetyl-ethoxypropanol) 8 hours.</p>
<p>Ethanol</p>	<p><b>SUVA (Switzerland, 1/2023).</b> TWA: 500 ppm 8 hours. TWA: 960 mg/m<sup>3</sup> 8 hours. STEL: 1000 ppm 15 minutes. STEL: 1920 mg/m<sup>3</sup> 15 minutes.</p>
<p>Butanone</p>	<p><b>SUVA (Switzerland, 1/2023). Absorbed through skin.</b> TWA: 200 ppm 8 hours. TWA: 590 mg/m<sup>3</sup> 8 hours. STEL: 200 ppm 15 minutes. STEL: 590 mg/m<sup>3</sup> 15 minutes.</p>
<p>acetone</p>	<p><b>SUVA (Switzerland, 1/2023).</b> TWA: 500 ppm 8 hours. TWA: 1200 mg/m<sup>3</sup> 8 hours. STEL: 1000 ppm 15 minutes. STEL: 2400 mg/m<sup>3</sup> 15 minutes.</p>
<p>Dipropyleneglycolmethylether</p>	<p><b>SUVA (Switzerland, 1/2023). [Dipropylene glycol methyl ether (mixture of isomers)]</b> STEL: 50 ppm 15 minutes. Form: vapour and aerosols STEL: 300 mg/m<sup>3</sup> 15 minutes. Form: vapour and aerosols TWA: 50 ppm 8 hours. Form: vapour and aerosols TWA: 300 mg/m<sup>3</sup> 8 hours. Form: vapour and aerosols</p>
<p>Ethanol</p>	<p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 1000 ppm 8 hours. TWA: 1920 mg/m<sup>3</sup> 8 hours.</p>
<p>Butanone</p>	<p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b> STEL: 899 mg/m<sup>3</sup> 15 minutes. STEL: 300 ppm 15 minutes. TWA: 600 mg/m<sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.</p>
<p>acetone</p>	<p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> STEL: 3620 mg/m<sup>3</sup> 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 500 ppm 8 hours.</p>

## SECTION 8: Exposure controls/personal protection

Dipropyleneglycolmethylether

TWA: 1210 mg/m<sup>3</sup> 8 hours.

**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**

TWA: 308 mg/m<sup>3</sup> 8 hours.

TWA: 50 ppm 8 hours.

### Biological exposure indices

Product/ingredient name	Exposure indices
No exposure indices known.	
No exposure indices known.	
acetone	<b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021)</b> BLV: 80 mg/l, acetone [in urine]. Sampling time: after the end of the exposure or the end of the work shift.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
Butanone	<b>DFG BEI-values list (Germany, 7/2022) Notes: danger from percutaneous absorption (see p. 211 and p. 228).</b> BEI: 2 mg/l, 2-butanone [in urine]. Sampling time: end of exposure or end of shift. <b>TRGS 903 - BEI Values (Germany, 2/2022)</b> BEI: 2 mg/l, 2-butanone [in urine]. Sampling time: end of exposure or end of shift.
acetone	<b>DFG BEI-values list (Germany, 7/2022)</b> BEI: 50 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift. <b>TRGS 903 - BEI Values (Germany, 2/2022)</b> BEI: 80 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift.
No exposure indices known.	
Butanone	<b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022)</b> BEI: 28 µmol/l, methyl-ethyl-ketone [in urine]. Sampling time: at the end of the shift. BEI: 2 mg/l, methyl-ethyl-ketone [in urine]. Sampling time: at the end of the shift.
acetone	<b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2022)</b> BEI: 1380 µmol/l, acetone [in urine]. Sampling time: at the end of the shift. BEI: 80 mg/l, acetone [in urine]. Sampling time: at the end of the shift.
No exposure indices known.	
Butanone	<b>NAOSH (Ireland, 1/2011)</b> BMGV: 70 µmol/l, butan-2- one [in urine]. Sampling time: post shift.
acetone	<b>NAOSH (Ireland, 1/2011)</b> BMGV: 50 mg/l, acetone [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
No exposure indices known.	

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<p>No exposure indices known. No exposure indices known. No exposure indices known. No exposure indices known. No exposure indices known. No exposure indices known. No exposure indices known. No exposure indices known.</p>	
<p>acetone</p>	<p><b>Government regulation SR c. 355/2006 (Slovakia, 9/2020)</b> BLV: 103.9 µmol/mmol creatinine, acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 53.36 mg/g creatinine, acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1378 µmol/l, acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 80 mg/l, acetone [in urine]. Sampling time: at the end of exposure or work shift.</p>
<p>No exposure indices known. No exposure indices known. No exposure indices known.</p>	
<p>Butanone</p>	<p><b>SUVA (Switzerland, 1/2023)</b> BEI: 2 mg/l, 2-butanone (MEK) [in urine]. Sampling time: before the next shift or 4pm. BEI: 27.7 µmol/l, 2-butanone (MEK) [in urine]. Sampling time: before the next shift or 4pm.</p>
<p>acetone</p>	<p><b>SUVA (Switzerland, 1/2023)</b> BEI: 50 mg/l, acetone [in urine]. Sampling time: immediately after exposure or after working hours. BEI: 0.86 mmol/l, acetone [in urine]. Sampling time: immediately after exposure or after working hours.</p>
<p>Butanone</p>	<p><b>EH40/2005 BMGVs (United Kingdom (UK), 8/2018)</b> BGV: 70 µmol/l, butan-2-one [in urine]. Sampling time: post shift.</p>

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following:  
European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Ethanol	DNEL	Long term Oral	87 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	114 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	206 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	343 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	950 mg/m <sup>3</sup>	General population	Local

## SECTION 8: Exposure controls/personal protection

Butanone	DNEL	Long term Inhalation	950 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	1900 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	31 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	106 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	600 mg/m <sup>3</sup>	Workers	Systemic
acetone	DNEL	Long term Dermal	1161 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	62 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	62 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	186 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	200 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	1210 mg/m <sup>3</sup>	Workers	Systemic
Dipropylenglycolmethylether	DNEL	Short term Inhalation	2420 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	37.2 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	121 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	283 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	308 mg/m <sup>3</sup>	Workers	Systemic

### PNECs

No PNECs available

### 8.2 Exposure controls

#### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

##### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

##### Skin protection

## SECTION 8: Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.  
Recommendations : Wear suitable gloves tested to EN374.  
< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm  
1 - 4 hours (breakthrough time): 4H / Silver Shield® gloves.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.  
Filter type: A  
Filter type (spray application): A P
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.  
**Colour** : Colourless.  
**Odour** : Slight  
**Odour threshold** : Not available.  
**Melting point/freezing point** : Not available.  
**Initial boiling point and boiling range** :

Ingredient name	°C	°F	Method
acetone	56.05	132.9	
Ethanol	78.29	172.9	

- Flammability** : Not available.  
**Lower and upper explosion limit** : Lower: 1.1%  
Upper: 19%  
**Flash point** : Closed cup: 12°C (53.6°F)  
**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
Dipropyleneglycolmethylether	207	404.6	EU A.15
Butanone	404	759.2	

## SECTION 9: Physical and chemical properties

**Decomposition temperature** : Not available.  
**pH** : Not applicable.  
**Viscosity** : Not available.  
**Solubility(ies)** :  
Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/ water** : Not applicable.

**Vapour pressure** :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
acetone	180.01463	24				
Butanone	78.7564	10.5				

**Relative density** : Not available.

**Density** : Not available.

**Vapour density** : Not available.

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

### Particle characteristics

**Median particle size** : Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidising materials

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
Butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
acetone	LD50 Oral	Rat	5800 mg/kg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### Acute toxicity estimates



## SECTION 11: Toxicological information

Route	ATE value
Not available.	

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Butanone	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
acetone	Eyes - Mild irritant	Human	-	186300 ppm	-
	Eyes - Mild irritant	Rabbit	-	10 uL	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	395 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Dipropyleneglycolmethylether	Eyes - Mild irritant	Human	-	8 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Sensitisation

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Mutagenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Butanone	Category 3	-	Narcotic effects
acetone	Category 3	-	Narcotic effects
ethyl (S)-2-hydroxypropionate	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

## SECTION 11: Toxicological information

### Potential acute health effects

<b>Eye contact</b>	: Causes serious eye irritation.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: No specific data.
<b>Skin contact</b>	: No specific data.
<b>Ingestion</b>	: No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Potential chronic health effects

Not available.

<b>Conclusion/Summary</b>	: Not available.
<b>General</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - <i>Artemia franciscana</i> - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Chronic NOEC 100 µl/L Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
Butanone	Chronic NOEC 0.375 µl/L Fresh water	Fish - <i>Gambusia holbrooki</i> - Larvae	12 weeks
	Acute EC50 >500000 µg/l Marine water	Algae - <i>Skeletonema costatum</i>	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours

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## SECTION 12: Ecological information

acetone	Acute LC50 3220000 µg/l Fresh water	Larvae	
	Acute EC50 20.565 mg/l Marine water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute LC50 6000000 µg/l Fresh water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute LC50 10000 µg/l Fresh water	Crustaceans - <i>Gammarus pulex</i>	48 hours
	Acute LC50 5600 ppm Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Chronic NOEC 4.95 mg/l Marine water	Fish - <i>Poecilia reticulata</i>	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Algae - <i>Ulva pertusa</i>	96 hours
	Chronic NOEC 0.1 ml/L Fresh water	Crustaceans - <i>Daphniidae</i>	21 days
		Daphnia - <i>Daphnia magna</i> - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - <i>Gasterosteus aculeatus</i> - Larvae	42 days

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### 12.2 Persistence and degradability

**Conclusion/Summary** : This product has not been tested for biodegradation.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Ethanol	-0.35	-	Low
Butanone	0.3	-	Low
acetone	-0.23	-	Low
Dipropyleneglycolmethylether ethyl (S)	0.004	-	Low
-2-hydroxypropionate	0.31	-	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 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.






**European waste catalogue (EWC)** : 08.01.11

#### Packaging

## SECTION 13: Disposal considerations

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1993	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (butanone, acetone)	FLAMMABLE LIQUID, N.O.S. (ethanol, butanone)	FLAMMABLE LIQUID, N.O.S. (ethyl (S)-2-hydroxypropionate)	FLAMMABLE LIQUID, N.O.S. (ethyl (S)-2-hydroxypropionate)
14.3 Transport hazard class(es)	3 	3 	3  	3 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

### Additional information

- ADR/RID** : **Special provisions** 640 (C)  
**Tunnel code** (D/E)
- ADN** : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.  
**Special provisions** 640 (C)
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

- 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 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## 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)

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

## SECTION 15: Regulatory information

### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
HOLZSTAUBBINDEMITEMEL 0340-00	≥90	3

Labelling :

#### Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Persistent Organic Pollutants

Not listed.

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

Category
P5c

#### National regulations

##### Austria

VbF class : A I  
Very dangerous flammable liquid.

Limitation of the use of organic solvents : Permitted.

##### Czech Republic

Storage code : I

##### Denmark

##### Finland

##### France

##### Germany

Storage class (TRGS 510) : 3

#### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

#### Danger criteria

Category	Reference number
P5c	1.2.5.3

Hazard class for water : 1

Technical instruction on air quality control : TA-Luft Number 5.2.5: 90.2%

AOX : The product does not contain organically bound halogens which could lead to an AOX value in waste water.

##### Italy

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## SECTION 15: Regulatory information

D.Lgs. 152/06 : Not determined.

### Netherlands

Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development	Harmful via breastfeeding
ethanol	Listed	-	Fertility 1A	Development 1A	Listed

**Water Discharge Policy (ABM)** : A(1) Highly toxic for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

### Norway

### Sweden

### Switzerland

**VOC content** : VOC (w/w): 86%

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**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  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
SGG = Segregation Group  
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 Eye Irrit. 2, H319	On basis of test data Calculation method

### Full text of abbreviated H statements

## SECTION 16: Other information

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

### Full text of classifications [CLP/GHS]

Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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**Version** : 1

HOLZSTAUBBINDEMITTEL 0340-00

All variants

### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

