

SAFETY DATA SHEET

Plastic-Bond Hardener



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

1.1 Product identifier

Product name : Plastic-Bond Hardener
UFI : 3N40-H01F-Y00J-JKK3
Product code : 151220-B
Color : White.

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

Identified uses
Hardener for resins. Adhesives

1.3 Details of the supplier of the safety data sheet

CIMCO-Werkzeuge
GmbH & Co. KG
Hohenhagener Str. 1-5
D-42855 Remscheid
Tel. +49 (0) 2191 3718-01
Fax +49 (0) 2191 3718-86
info@cimco.de · www.cimco.de

e-mail address of person responsible for this SDS : info@cimco.de

1.4 Emergency telephone number

Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

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 Irrit. 2, H315
Skin Sens. 1, H317
STOT SE 3, H335
Aquatic Chronic 2, H411

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

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SECTION 2: Hazards identification

Hazard statements	: H225 - Highly flammable liquid and vapor. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: P280 - Wear protective gloves. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling.
Response	: P391 - Collect spillage. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
Storage	: P405 - Store locked up. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	: P501 - Dispose of waste according to applicable legislation.
Hazardous ingredients	: methyl methacrylate cobalt bis(2-ethylhexanoate)
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.

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
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	≥50 - ≤75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	-	[1] [2]
oxydipropyl dibenzoate	REACH #: 01-2119529241-49 EC: 248-258-5 CAS: 27138-31-4	≤10	Aquatic Chronic 3, H412	-	[1]
3,5-diethyl-1,2-dihydro-	REACH #:	≤2.1	Acute Tox. 4, H302	ATE [Oral] = 1620	[1]

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SECTION 3: Composition/information on ingredients

1-phenyl-2-propylpyridine	01-2120769712-47 EC: 252-091-3 CAS: 34562-31-7		Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	mg/kg M [Acute] = 1 M [Chronic] = 10	
ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]	EC: 253-039-2 CAS: 36443-68-2	≤0.38	Aquatic Chronic 1, H410	M [Chronic] = 10	[1]
cobalt bis(2-ethylhexanoate)	REACH #: 01-2119524678-29 EC: 205-250-6 CAS: 136-52-7	<0.1	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 1B, H360F Aquatic Acute 1, H400 Aquatic Chronic 3, H412	M [Acute] = 1	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤0.1	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
(2-methoxymethylethoxy) propanol	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤0.1	Not classified.	-	[2]
aniline	EC: 200-539-3 CAS: 62-53-3 Index: 612-008-00-7	<0.01	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 250 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (gases)] = 700 ppm STOT RE 1, H372: C ≥ 1% STOT RE 2, H373: 0.2% ≤ C < 1% M [Acute] = 10	[1] [2]

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.

SECTION 4: First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- 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, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Highly flammable liquid and vapor. 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. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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 spilled 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

- : 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.

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.

7.1 Precautions for safe handling

SECTION 7: Handling and storage

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c E2	5000 tonne 200 tonne	50000 tonne 500 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
methlyl methacrylate	TRGS 900 OEL (Germany, 7/2021). TWA: 210 mg/m ³ 8 hours. PEAK: 420 mg/m ³ 15 minutes. TWA: 50 ppm 8 hours. PEAK: 100 ppm 15 minutes. DFG MAC-values list (Germany, 10/2021). Skin sensitizer. TWA: 50 ppm 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 210 mg/m ³ 8 hours. PEAK: 420 mg/m ³ , 4 times per shift, 15 minutes.
cobalt bis(2-ethylhexanoate)	TRGS 910 (Germany, 7/2021). []

SECTION 8: Exposure controls/personal protection

1-methoxy-2-propanol	<p>PEAK: 40 µg/m³, 0 times per shift, 15 minutes. Form: alveolar fraction TWA-TC: 5 µg/m³ 8 hours. Form: alveolar fraction TWA-AC: 0.5 µg/m³ 8 hours. Form: alveolar fraction</p> <p>TRGS 900 OEL (Germany, 7/2021). TWA: 370 mg/m³ 8 hours. PEAK: 740 mg/m³ 15 minutes. TWA: 100 ppm 8 hours. PEAK: 200 ppm 15 minutes.</p> <p>DFG MAC-values list (Germany, 10/2021). TWA: 100 ppm 8 hours. PEAK: 200 ppm, 4 times per shift, 15 minutes. TWA: 370 mg/m³ 8 hours. PEAK: 740 mg/m³, 4 times per shift, 15 minutes.</p>
(2-methoxymethylethoxy)propanol	<p>TRGS 900 OEL (Germany, 7/2021). [] TWA: 310 mg/m³ 8 hours. PEAK: 310 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. PEAK: 50 ppm 15 minutes.</p> <p>DFG MAC-values list (Germany, 10/2021). [Dipropylene glycol monomethyl ether] TWA: 50 ppm 8 hours. PEAK: 50 ppm, 4 times per shift, 15 minutes. TWA: 310 mg/m³ 8 hours. PEAK: 310 mg/m³, 4 times per shift, 15 minutes.</p>
aniline	<p>TRGS 900 OEL (Germany, 7/2021). Absorbed through skin. Skin sensitizer. TWA: 7.7 mg/m³ 8 hours. PEAK: 15.4 mg/m³ 15 minutes. TWA: 2 ppm 8 hours. PEAK: 4 ppm 15 minutes.</p> <p>DFG MAC-values list (Germany, 10/2021). Absorbed through skin. Skin sensitizer. TWA: 2 ppm 8 hours. PEAK: 4 ppm, 4 times per shift, 15 minutes. TWA: 7.7 mg/m³ 8 hours. PEAK: 15.4 mg/m³, 4 times per shift, 15 minutes.</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
methyl methacrylate	DNEL	Long term Dermal	8.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	13.67 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	74.3 mg/m ³	General population	Systemic

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oxydipropyl dibenzoate	DNEL	Long term Inhalation	104 mg/m ³	General population	Local	
	DNEL	Long term Inhalation	208 mg/m ³	Workers	Local	
	DNEL	Long term Inhalation	208 mg/m ³	Workers	Systemic	
	DNEL	Short term Dermal	1.5 mg/cm ²	General population	Local	
	DNEL	Long term Dermal	1.5 mg/cm ²	General population	Local	
	DNEL	Short term Dermal	1.5 mg/cm ²	Workers	Local	
	DNEL	Long term Dermal	1.5 mg/cm ²	Workers	Local	
	DNEL	Long term Oral	8.2 mg/kg bw/day	General population	Systemic	
	DNEL	Short term Inhalation	208 mg/m ³	General population	Local	
	DNEL	Short term Inhalation	416 mg/m ³	Workers	Local	
	DNEL	Long term Dermal	0.22 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Inhalation	8.69 mg/m ³	General population	Systemic	
	DNEL	Short term Inhalation	8.7 mg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	8.8 mg/m ³	Workers	Systemic	
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic	
	DNEL	Short term Inhalation	35.08 mg/m ³	Workers	Systemic	
	DNEL	Short term Oral	80 mg/kg bw/day	General population	Systemic	
	ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl) propionate]	DNEL	Short term Dermal	80 mg/kg bw/day	General population	Systemic
		DNEL	Short term Dermal	170 mg/kg bw/day	Workers	Systemic
DNEL		Long term Inhalation	3 mg/m ³	Workers	Local	
DNEL		Short term Inhalation	3 mg/m ³	Workers	Systemic	
	DNEL	Long term	3 mg/m ³	Workers	Systemic	

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cobalt bis(2-ethylhexanoate)		Inhalation			
	DNEL	Long term Oral	4.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	43 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	86 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	37 µg/m ³	General population	Local
	DNEL	Long term Oral	55.8 µg/kg bw/day	General population	Systemic
1-methoxy-2-propanol	DNEL	Long term Inhalation	235.1 µg/m ³	Workers	Local
	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43.9 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	369 mg/m ³	Workers	Systemic
(2-methoxymethylethoxy)propanol	DNEL	Short term Inhalation	553.5 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	37.2 mg/m ³	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
aniline	DNEL	Long term Inhalation	308 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	7.7 mg/m ³	Workers	Systemic
	DNEL	Short term	15.4 mg/m ³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	Inhalation			
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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, vapor 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. Contaminated work clothing should not be allowed out of the workplace. 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

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. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber ; 4 - 8 hours (breakthrough time): Viton®/butyl rubber

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. Recommended : organic vapor (Type AX) and particulate filter

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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : White.
- Odor** : Sharp.
- Odor threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flammability** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Flammable in the presence of the following materials or conditions: heat.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : Closed cup: 10°C (50°F)
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- pH** : Not applicable.
- Viscosity** : Kinematic (40°C): >40 mm²/s
- Solubility(ies)** :
Not available.
- Solubility in water** : Not available.
- Miscible with water** : No.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
methyl methacrylate	27.75	3.7				
1-methoxy-2-propanol	8.5	1.1				
aniline	0.3	0.04				
oxydipropyl dibenzoate	0	0	EU A.4	0	0	EU A.4

- Relative density** : 0.97 to 1.01
- Vapor density** : Not available.
- Explosive properties** : Not available.
- Oxidizing properties** : Not available.
- Particle characteristics**
- Median particle size** : Not applicable.

9.2 Other information

- SADT** : Not available.
- SAPT** : Not available.

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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 pressurize, 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:
oxidizing materials

10.6 Hazardous decomposition products : Reactive or incompatible with the following materials: oxidizing materials.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
methyl methacrylate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	7872 mg/kg	-
oxydipropyl dibenzoate	LD50 Oral	Rat	3295 mg/kg	-
cobalt bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	1.22 g/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
(2-methoxymethylethoxy) propanol	LD50 Dermal	Rabbit	10 mL/kg	-
	LD50 Oral	Rat	5.5 mL/kg	-
	LD50 Oral	Rat	5400 uL/kg	-
aniline	LC50 Inhalation Gas.	Rat	250 ppm	1 hours
	LD50 Dermal	Rat	1400 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	81818.18 mg/kg

Irritation/Corrosion

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Product/ingredient name	Result	Species	Score	Exposure	Observation
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
(2-methoxymethylethoxy) propanol	Eyes - Mild irritant	Human	-	8 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
aniline	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

Conclusion/Summary : Not available.

Sensitization

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
methyl methacrylate	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
aniline	Category 1	-	-

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

SECTION 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

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

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Not available.

Conclusion/Summary	: Not available.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: 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
methyl methacrylate	Acute LC50 130000 µg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours
aniline	Acute EC50 175000 µg/l Fresh water	Algae - Chlorella pyrenoidosa	72 hours
	Acute EC50 20000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 44 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 80 µg/l Fresh water	Daphnia - Daphnia magna	48 hours

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SECTION 12: Ecological information

	Acute LC50 7600 µg/l Fresh water	Fish - Carassius auratus - Egg	4 days
	Chronic NOEC 90000 µg/l Fresh water	Algae - Chlorella pyrenoidosa	72 hours
	Chronic NOEC 4 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.422 mg/l Fresh water	Fish - Pimephales promelas - Embryo	32 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
methyl methacrylate	1.38	-	low
cobalt bis(2-ethylhexanoate)	-	15600	high
1-methoxy-2-propanol	<1	-	low
(2-methoxymethylethoxy) propanol	0.004	-	low
aniline	0.91	2.6	low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

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).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized 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)

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SECTION 13: Disposal considerations

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances




Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

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. Vapor 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	IMDG	IATA
14.1 UN number	UN1133	UN1133	UN1133
14.2 UN proper shipping name	ADHESIVES	ADHESIVES	Adhesives
14.3 Transport hazard class(es)	3 	3 	3 
14.4 Packing group	II	II	II
14.5 Environmental hazards	Yes. 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	Yes. 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Hazard identification number 30

Limited quantity 5 L

Special provisions 640 (C)

Tunnel code (D/E)

Remarks containing flammable liquid (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C not more than 110 kPa)

ADR Classification Code: F1

IMDG : **Emergency schedules** F-E, S-D

Special provisions 223, 955

Viscous liquid exception This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.

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SECTION 14: Transport information

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.
Special provisions A3

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

14.7 Transport in bulk according to 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)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Restrictions on Manufacture, Marketing and Use

Country	Product name	Conc.	Designation	Usage
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Other EU regulations

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

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

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

VOC content : 50.7 %

VOC (g/L) : 510

Seveso Directive

This product is controlled under the Seveso Directive.

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SECTION 15: Regulatory information

Danger criteria

Category

P5c
E2

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
cobalt bis(2-ethylhexanoate)	DFG MAC-values list	Cobalt and cobalt compounds (inhalable fraction)	K2, M3	-
	Germany TRGS905	Cobalt-Verbindungen (in Form atembarer Stäube/Aerosole), ausgenommen die in dieser Liste bzw. in Anhang VI Teil 3 der CLP-Verordnung namentlich aufgeführten Cobaltverbindungen, Cobalt-haltigen Spinellen und organischen Cobalt-Sikkativen	K3	
aniline	DFG MAC-values list	Aniline	K3	-

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
E2	1.3.2

Hazard class for water : 2

Technical instruction on air quality control : TA-Luft Number 5.2.5: 60-72%

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

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.

Inventory list

SECTION 15: Regulatory information

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory : All components are listed or exempted.
Japan	: Japan inventory (CSCL) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: Not determined.
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
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H372	Causes damage to organs through prolonged or repeated

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SECTION 16: Other information

H400 H410 H411 H412	exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]

Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Carc. 2 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Muta. 2 Repr. 1B Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A STOT RE 1 STOT SE 3	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.