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CHO-BOND® 1030 SDS No: PHC-045 EU

SDS Revision Date (dd/mm/yyyy): 03/06/2021

Revision No.: 4

SAFETY DATA SHEET

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier : CHO-BOND® 1030

Product Code(s) : 50-02-1030-0000; 50-02-1030-1000; 50-01-1030-0000

SDS No. : PHC-045 EU

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

: Moisture cure adhesive / sealant. Use pattern: professional use. No restrictions on use known.

1.3 Details of the supplier of the safety data sheet:

Parker Hannifin Manufacturing France SAS

ZAC des Epineaux 7 avenue Louis Blériot 95740 Frépillon

France

Email: parker.france@parker.com Website: www.parkerfrance.fr

Telephone : 033 (01) 34 32 39 00

1.4 Emergency Telephone Number

: +1 (352) 323 3500 (INFOTRAC - U.S.A.); +33 (01) 45 42 59 59 [ORFILA (INRS) - France]

1.5 National Contact

E-mail: chomerics europe@parker.com

Website: www.chomerics.com

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

paste - grey. Mild odour.

Most important hazards:

Causes serious eye irritation. Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS.

Not classified for hazards to the environment. See Section 12 for more environmental information.

This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification: Eye damage/irritation - Category 2; H319

2.2 Label elements

Hazard pictogram(s)



Hazardous components which must be listed on the label: None.

Signal word: Warning!



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Hazard statements:

H319 - Causes serious eye irritation.

Precautionary statements:

P264 - Wash hands and face thoroughly after handling.

P280 - Wear protective gloves/clothing and eye/face protection.

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/attention.

P501 - Dispose of contents/container in accordance with local regulation.

Supplemental information:

None required according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

Other hazards which do not result in classification:

May slowly hydrolyze in the presence of water to: Methanol. Upon completion of the curing process, these hydrolysis products are no longer released. When heated above 150°C in air, may release formaldehyde gas. Heating or fire can release toxic gas.

May be mildly irritating to skin and respiratory system. May cause gastrointestinal irritation. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation. Inhalation of fumes may result in metal fume fever, a flu-like illness. Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

PBT assessment:

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature - Mixture of: Metal compounds; Silicone elastomer.

The following substances shall be indicated according to legislation:

Substance name	CAS No	EC No.	Reach Registration No.	<u>% Weight</u>	Classification according to Regulation (EC) nr. 1272/2008	SCL, M-factor, ATE
Copper	7440-50-8	231-159-6	Not applicable.	70.0 - 80.0	not hazardous. Substances for which there are Member Country workplace exposure limits.	• • •
Polydimethylsiloxane	70131-67-8	Polymer	Not applicable.	10.0 - 14.0	Eye Irrit. 2; H319 (self classified)	Not applicable



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silver	7440-22-4	231-131-3	Not applicable.	1.0 - 5.0	not hazardous. Substances for which there are Community workplace exposure limits.	applicable.
Trimethoxymethylsilan e	1185-55-3	214-685-0	Not applicable.	1.0 - 2.0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 (self classified)	Not applicable.
Titanium Dioxide	13463-67-7	236-675-5	Not applicable.	0.1 - 0.5	Carc. 2; H351 (self classified)	Not applicable.
Possible decompositi are:	on products in	case of hydrol	ysis			
Methanol	67-56-1	200-659-6	Not applicable.	Not known.	Flam. Liq. 2; H225 *Acute Tox. 3; H301 *Acute Tox. 3; H311 *Acute Tox. 3; H331 STOT SE 1; H370	Not applicable.
The following ingredic product only when he						
formaldehyde	50-00-0	200-001-8	Not applicable.	Not known.	Carc. 1B; H350 Muta. 2; H341 *Acute Tox. 3; H301 *Acute Tox. 3; H311 *Acute Tox. 3; H331 Skin Corr. 1B; H314 Skin Sens. 1;	Not applicable.

^{*}The above CLP Acute toxicity Classifications for the following chemicals are 'Minimum Classifications': Methanol; formaldehyde.

For the full text of the H phrases not mentioned in this Section or in Section 2, see Section 16.

SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures

Ingestion : Do NOT induce v

: Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

When symptoms persist or in all cases of doubt, seek medical advice.

Inhalation : If breathed in, move person into fresh air. If breathing is irregular or stopped,

administer artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. When symptoms persist or in all cases of doubt, seek medical advice.

Skin contact: Remove contaminated clothing. Wash off with soap and plenty of water. When

symptoms persist or in all cases of doubt, seek medical advice. Wash contaminated

clothing before reuse.



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Eye contact

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.

4.1.2 Self-protection for the first aider

: None known or reported by the manufacturer.

4.2 Most important symptoms and effects, both acute and delayed

: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

May be mildly irritating to skin and respiratory system. May cause redness and pain. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

When heated above 150°C in air, may release formaldehyde gas. Formaldehyde is an eye and throat irritant and acute toxicant. Formaldehyde has shown limited evidence of a carcinogenic effect. Formaldehyde may cause sensitisation by skin contact.

May slowly hydrolyze in the presence of water to: Methanol. Methanol is considered to be dangerous.

4.3 Indication of any immediate medical attention and special treatment needed

: Provide general supportive measures and treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

: Carbon dioxide (CO2); Dry chemical; Alcohol resistant foam; Dry sand .

Unsuitable extinguishing media

: May react with water. Do not use water if possible.

5.2 Special hazards arising from the substance or mixture

: Not considered flammable. However, may burn if exposed to extreme heat and flame. During cure, vapours are released which may be harmful. May slowly hydrolyze in the presence of water to: Methanol. Upon completion of the curing process, these hydrolysis products are no longer released. The pressure in sealed containers can increase under the influence of heat. Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; formaldehyde; Metal oxides; Silicon oxides.

5.3 Advice for firefighters

Protective equipment for fire-fighters

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures

: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not get water inside containers. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

: Wear suitable protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up.



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6.2 Environmental precautions

: Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

6.3 Methods and material for containment and cleaning up

: Ventilate the area. Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Use inert, non-combustible absorbents to assist the pick up of material. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

6.4 Reference to other sections

: Refer to protective measures listed in sections 7 and 8. Refer to Section 13 for disposal of contaminated material.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

: Provide adequate ventilation. Wear suitable protective equipment. Wear protective gloves/clothing and eye/face protection. Avoid breathing dust, fume or vapors. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and direct flame. Keep away from incompatibles. Protect from moisture. Keep container tightly closed. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

: Keep containers tightly closed in a cool, well-ventilated place. Inspect periodically for damage or leaks. Protect against physical damage. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store away from incompatible materials (see Section 10 of the SDS).

7.3 Specific end use(s) : Adhesives and/or sealants

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Chemical Name	Exposure Limits	<u>Type</u>	<u>Notes</u>
Copper			
	1 mg/m³ (TWA)	Finland (OEL)	None.
	0.2 mg/m³ (fumes); 1 mg/m³ (dust) (TWA) 2 mg/m³ (dust) (STEL)	France (OEL)	None.
	1 mg/m³; 0.1 mg/m³ (fumes) (TWA) 4 mg/m³; 0.4 mg/m³ (fumes) (STEL)	Hungary (OEL)	None.
	0.1 mg/m³ (inhalable) (TWA)	Netherlands (OEL)	None.
	0.2 mg/m³ (TWA)	Poland (OEL)	None.
	0.2 mg/m³ (fumes); 1 mg/m³ (dust) (TWA)	Spain (OEL)	None.
	1 mg/m³ (total dust); 0.2 mg/m³ (respirable dust)	Sweden (OEL)	None.
	0.2 mg/m³ (fumes); 1 mg/m³ (dust) (TWA) 2 mg/m³ (dust) (STEL)	The United Kingdom (WELs)	None.



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Polydimethylsiloxane			
	None known.	European Union (OEL)	None.
silver			
	0.1 mg/m³ (TWA)	European Union (OEL)	None.
	0.1 mg/m³ (TWA)	Finland (OEL)	None.
	0.1 mg/m³ (TWA)	France (OEL)	None.
	0.1 mg/m³ (inhalable) (TWA)	Germany (OEL)	(exposure factor 8)
	0.1 mg/m³ (TWA) 0.4 mg/m³ (STEL)	Hungary (OEL)	None.
	0.4 mg/m² (STEL) 0.1 mg/m³ (TWA)	Italy (OEL)	None.
	0.1 mg/m³ (TWA)	Netherlands (OEL)	None.
	0.05 mg/m³ (TWA)	Poland (OEL)	None.
	0.1 mg/m³ (TWA)	Spain (OEL)	None.
	0.1 mg/m³ (TWA)	Sweden (OEL)	None.
	0.1 mg/m³ (TWA)	The United Kingdom (WELs)	None.
Trimethoxymethylsilane			
	None known.	European Union (OEL)	None.
Γitanium Dioxide			
	10 mg/m³ (TWA)	France (OEL)	None.
	10 mg/m³ (TWA)	Poland (OEL)	None.
	10 mg/m³ (TWA)	Spain (OEL)	None.
	10 mg/m³ (TWA)	Sweden (OEL)	None.
	10 mg/m³ (inhalable); 4 mg/m³ (respirable dust) (TWA)	The United Kingdom (WELs)	None.
Methanol			
	200 ppm (260 mg/m³) (TWA)	European Union (OEL)	Possibility of significant uptake through the skin
	200 ppm (270 mg/m³) (TWA) 250 ppm (330 mg/m³) (STEL)	Finland (OEL)	Potential for cutaneous absorption
	200 ppm (260 mg/m³) (TWA) 1000 ppm (1300 mg/m³) (STEL)	France (OEL)	Risk of cutaneous absorption
	200 ppm (270 mg/m³ (exposure factor 4) (TWA)	Germany (OEL)	Skin notation
	260 mg/m³ (TWA)	Hungary (OEL)	Potential for cutaneous absorption
	200 ppm (260 mg/m³) (TWA)	Italy (OEL)	Skin - Potential for cutaneous absorption
	100 ppm (133 mg/m³) (TWA)	Netherlands (OEL)	Skin notation
	100 mg/m³ (TWA) 300 mg/m³ (STEL)	Poland (OEL)	Skin notation



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	200 ppm (266 mg/m³ (TWA)	Spain (OEL)	Skin - Potential for cutaneous absorption
	200 ppm (250 mg/m³) (TWA) 250 ppm (350 mg/m³) (STEL)	Sweden (OEL)	Skin notation
	200 ppm (266 mg/m³) (TWA) 250 ppm (333 mg/m³) (STEL)	The United Kingdom (WELs)	Potential for cutaneous absorption
formaldehyde			
	0.3 ppm (0.37 mg/m³) (TWA) 1 ppm (1.2 mg/m³) (STEL)	Finland (OEL)	None.
	0.5 ppm (TWA) 1 ppm (STEL)	France (OEL)	None.
	0.3 ppm (0.37 mg/m³) (TWA)	Germany (OEL)	(exposure factor 2)
	0.6 mg/m³ (TWA) 0.6 mg/m³ (STEL)	Hungary (OEL)	Potential for cutaneous absorption
	0.15 mg/m³ (TWA) 0.5 mg/m³ (STEL)	Netherlands (OEL)	None.
	0.5 mg/m³ (TWA) 1 mg/m³ (STEL)	Poland (OEL)	Skin notation
	0.3 ppm (0.37 mg/m³) (STEL)	Spain (OEL)	None.
	0.3 ppm (0.37 mg/m³) (TWA) 0.6 ppm (0.74 mg/m³) (Ceiling Limit Value)	Sweden (OEL)	Skin notation Carcinogen Sensitiser
	2 ppm (2.5 mg/m³) (TWA) 2 ppm (2.5 mg/m³) (STEL)	The United Kingdom (WELs)	None.

Chemical Name	Biological Exposure Indices	<u>Type</u>
Methanol		
	15 mg/L, Determinant: Methanol, Specimen: Urine	Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4
	30 mg/L, Determinant: Methanol, Specimen: Urine	Germany. TRGS 903, BAT List (Biological Limit Values)
	15 mg/L, Determinant: Methanol (Background noise on non-exposed subjects, Non-specific (observed after the exposure to other subjects)), Specimen: Urine	France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS ND 2065)



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Biological Exposure Indices:

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065) Methanol (CAS # 67-56-1)

15 mg/L, Determinant: Methanol (Background noise on non-exposed subjects, Non-specific (observed after the exposure to other subjects)), Specimen: Urine

Germany. TRGS 903, BAT List (Biological Limit Values)

Methanol (CAS # 67-56-1)

30 mg/L, Determinant: Methanol, Specimen: Urine

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Methanol (CAS # 67-56-1)

15 mg/L, Determinant: Methanol, Specimen: Urine

Derived No Effect Level (DNEL): No information available.

Predicted No Effect Concentration (PNEC): No information available.

8.2 Exposure controls

Ventilation and engineering measures

: Provide adequate ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of

insufficient ventilation wear suitable respiratory equipment.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter. The filter class

for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be

used.

Skin protection: Wear protective gloves. The suitability for a specific workplace should be discussed

with the producers of the protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived

from it. Wear sufficient clothing to prevent skin contact.

Eye / face protection: Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles; Safety

glasses with side shields. See also EN 166.

Other protective equipment

: Ensure that eyewash stations and safety showers are close to the workstation location.

General hygiene considerations

: Avoid breathing dust, fume or vapors. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

8.3 Environmental exposure controls

: Avoid release to the environment. Dike for water control.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state : paste - grey
Colour : grey
Odour : mild

Odour threshold : No information available.

PH : No information available.

Flash point : > 93.3°C (estimated)

Flashpoint (Method) : No information available.

Lower flammable limit (% by vol.)

: No information available.



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Upper flammable limit (% by vol.)

: No information available.

Auto-ignition temperature

: No information available.

Decomposition temperature

: No information available.

Oxidizing properties : None known.

Explosive properties : Not explosive
Initial boiling point and boiling range

: No information available.

Melting/Freezing point : No information available.

Relative density : > 1

Solubility in water: insoluble. May react with water.

Other solubility(ies) : No information available.

Vapour pressure : No information available.

Vapour density : No information available.

Partition coefficient: n-octanol/water

: No information available.

Viscosity : No information available.

Evaporation rate (BuAe = 1)

: No information available.

Particle characteristics : Not applicable.

9.2 Other Information

Volatiles (% by weight) : negligible Volatile organic Compounds (VOC's)

: No information available.

Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity : Not normally reactive. May slowly hydrolyze in the presence of water to: Methanol.

Upon completion of the curing process, these hydrolysis products are no longer

released.

10.2 Chemical stability : Stable under normal conditions. When heated above 150°C in air, may release

formaldehyde gas.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Hazardous

polymerization does not occur.

10.4 Conditions to avoid : Direct sources of heat. Avoid moisture. Avoid contact with incompatible materials. Do

not use in areas without adequate ventilation.

10.5 Incompatible materials

: Water; Oxidizing agents; Strong acids; Bases.

10.6 Hazardous decomposition products

: Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; formaldehyde; metal oxides; Silicon oxides.



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SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects:

Acute toxicity : According to the classification criteria of the European Union, this product is not

considered as being an acutely toxic chemical.

Skin corrosion/Irritation : According to the classification criteria of the European Union, this product is not

considered as being a skin corrosive or irritant.

Serious eye damage/irritation

: This mixture is classified as hazardous in accordance with Regulation (EC) No

1272/2008. Classification:

Eye damage/irritation - Category 2. Causes severe eye irritation.

Respiratory or skin sensitisation

: According to the classification criteria of the European Union, this product is not

considered as being an allergic respiratory sensitiser.

According to the classification criteria of the European Union, this product is not

considered as being an allergic skin sensitiser.

Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde

may cause sensitisation by skin contact.

Germ cell mutagenicity : Contains no ingredient listed as a mutagen.

Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde

may cause mutations to non-reproductive (somatic) cells, based on animal data.

: Not classifiable as a human carcinogen. Carcinogenicity

Contains: titanium dioxide. Titanium dioxide is suspected of causing cancer by

inhalation. However, the concentration in this mixture is below the concentration cutoff

required for classification.

Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde is

classified as carcinogenic.

Contains no ingredient listed as toxic to reproduction. Reproductive toxicity

: According to the classification criteria of the European Union, this product is not STOT-single exposure

expected to cause target organ toxicity through a single exposure.

STOT-repeated exposure: According to the classification criteria of the European Union, this product is not

expected to cause target organ toxicity through repeated exposures.

: According to the classification criteria of the European Union, this product is not **Aspiration hazard**

considered as being an aspiration hazard to humans.

Routes of exposure

Eye contact; Skin contact; Inhalation; Ingestion. Effects of acute exposure:

Inhalation: Mild respiratory irritant. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of

breath. Avoid heating, which will result in the liberation of formaldehyde gas.

Formaldehyde causes severe respiratory irritation, lung inflammation and pulmonary

edema.

Skin contact: May cause mild skin irritation. Direct skin contact may cause temporary

redness.

Eye contact: Causes severe eye irritation. Symptoms may include stinging, tearing,

redness, swelling and blurred vision.

Ingestion:Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.



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: Repeated exposure may cause skin dryness or cracking. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

Information on other Hazards

: May slowly hydrolyze in the presence of water to: Methanol. Methanol is considered to be dangerous.

Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde is an eye and throat irritant and acute toxicant.

11.1.1 Acute Toxicity

Toxicological data

: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

	LC50(4hr)	LD ₅₀		
Chemical name	inh, rat	(Oral, rat)	(Rabbit, dermal)	
Copper	> 5.11 mg/L (dust) (No mortality)	> 2500 mg/kg	> 2000 mg/kg	
Polydimethylsiloxane > 11.59 mg/L (mist)		> 15 400 mg/kg	> 2000 mg/kg	
silver	> 5.16 mg/L (dust) (No mortality)	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)	
Trimethoxymethylsilane	> 51.4 mg/L (vapour)	> 9500 mg/kg	> 9500 mg/kg	
Titanium Dioxide > 6.82 mg/kg (dust) (No mortality)		> 25 000 mg/kg	> 10 000 mg/kg	
Possible decomposition	products in case of hydrolys	is are:		
Methanol	> 5000 ppm/6H (4.1 mg/L/4H (vapour)	5628 mg/kg (rat) The estimated human lethal dose is: 300 - 1000 mg/kg	> 393 mg/kg (Monkey) 15 800 mg/kg (rabbit)	
The following ingredient	may be released from the pro	oduct only when heated a	above 150°C:	
formaldehyde	287 ppm	800 mg/kg (rat) The estimated human lethal dose is: 317 - 475 mg/kg	300 mg/kg	

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

: No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. May slowly hydrolyze in the presence of water to: Methanol. Upon completion of the curing process, these hydrolysis products are no longer released. This product also contains: Copper. The acute toxicity of copper to aquatic species varies drastically by the chemical form and correlates with the availability of free ionic copper. Aquatic toxicity is highly variable not only by organism but with physical and chemical characteristics of the water itself.

See the following tables for individual ingredient ecotoxicity data.



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Ecotoxicity data:

P		Toxicity to Fish			
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor	
Copper	7440-50-8	No information available.	No information available.	None.	
Polydimethylsiloxane	70131-67-8	No information available.	No information available.	None.	
silver	7440-22-4	No information available.	No information available.	None.	
Trimethoxymethylsilane	1185-55-3	> 110 mg/L (Rainbow trout) (hydrolysis product and/or parent compound)	No information available.	None.	
Titanium Dioxide	13463-67-7	> 100 mg/L (Japanese ricefish)	No information available.	None.	
Methanol	67-56-1	15 400 mg/L (Bluegill sunfish)	446.7 mg/L/28-day (Fathead minnow) (QSAR)	None.	
formaldehyde	50-00-0	6.7 mg/L (Striped bass)	≥ 48 mg/L/28-day (Japanese ricefish)	None.	

<u>Ingredients</u>	CAS No	Toxicity to Daphnia			
		EC50 / 48h	NOEC / 21 day	M Factor	
Copper	7440-50-8	No information available.	No information available.	None.	
Polydimethylsiloxane	70131-67-8	No information available.	No information available.	None.	
silver	7440-22-4	No information available.	No information available.	None.	
Trimethoxymethylsilane	1185-55-3	> 122 mg/L (Daphnia magna) (hydrolysis product and/or parent compound)	No information available.	None.	
Titanium Dioxide	13463-67-7	> 100 mg/L (Daphnia magna)	No information available.	None.	
Methanol	67-56-1	> 10 000 mg/L (Daphnia magna)	208 mg/L (QSAR)	None.	
formaldehyde	50-00-0	5.8 mg/L (Daphnia magna)	No information available.	None.	



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<u>Ingredients</u>	CAS No	Toxicity to Algae			
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor	
Copper	7440-50-8	No information available.	No information available.	None.	
Polydimethylsiloxane	70131-67-8	No information available.	No information available.	None.	
silver	7440-22-4	No information available.	No information available.	None.	
Trimethoxymethylsilane	1185-55-3	> 120 mg/L/72hr (Green algae) (hydrolysis product and/or parent compound)	120 mg/L/72hr (hydrolysis product and/or parent compound)	None.	
Titanium Dioxide	13463-67-7	> 100 mg/L/72hr (Green algae)	No information available.	None.	
Methanol	67-56-1	22 000 mg/L/96hr (Green algae)	No information available.	None.	
formaldehyde	50-00-0	14.7 mg/L/24hr (Green algae)	No information available.	None.	

12.2 Persistence and degradability

The product itself has not been tested.

Contains the following chemicals which are not readily biodegradable: Copper; silver;

Trimethoxymethylsilane; titanium dioxide.

12.3 Bioaccumulation potential

: The product itself has not been tested. See the following data for ingredient information.

<u>Components</u>	Partition coefficient n-octanol/water (log	Bioconcentration factor (BCF)
Trimethoxymethylsilane (CAS 1185-55-3)	<u>Kow)</u> - 0.67	3.16
Methanol (CAS 67-56-1)	- 0.82 to - 0.64	< 10 (common carp)
formaldehyde (CAS 50-00-0)	0.35	3.0

12.4 Mobility in soil : The p

: The product itself has not been tested.

12.5 Results of PBT and vPvB assessment

 This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Endocrine disrupting properties

: None known or reported by the manufacturer.

12.7 Other Adverse Environmental effects

: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.8 Additional information: None known or reported by the manufacturer.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Handling for Disposal

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. This material and its container must be disposed of in a safe way.



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Methods of Disposal

: Dispose of in accordance with the European Directives on waste and hazardous waste. Waste must be classified and labelled prior to recycling or disposal. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Regulatory Information	14.1 UN Number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing Group	Label
ICAO/IATA	None.	Not regulated.	not regulated	none	\otimes
ICAO/IATA Additional information	None.	!	-		
IMDG	None.	Not regulated.	not regulated	none	\otimes
IMDG Additional information	None.	!			
ADR/RID	None.	not regulated	not regulated	none	\otimes
EU ADR/RID Classification Code	Not applicab	le.			
EU ADR / RID Hazard Identification Number	Not applicab	le.			
ADR/RID Additional information	Not classified road and rail.	as dangerous for conveyance in the meaning of the re	egulations for the tran	sport of da	ngerous goods

14.5 Environmental hazards :

This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

14.6 Special precautions for user

: Appropriate advice on safety must accompany the package. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not applicable.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture



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: Classification according to Regulation (EC) No. 1272/2008 on the classification of hazardous mixtures.

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:

None of the components are specifically listed.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended

None of the components are specifically listed.

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances:

None of the components are specifically listed.

Directive 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work:

Polydimethylsiloxane (CAS # 70131-67-8) Trimethoxymethylsilane (CAS # 1185-55-3) titanium dioxide (CAS # 13463-67-7) Methanol (CAS # 67-56-1) formaldehyde (CAS # 50-00-0)

Directive 94/33/EC on the protection of young people at work: Methanol (CAS # 67-56-1) formaldehyde (CAS # 50-00-0)

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended [including Regulation (EU) 2015/830].

Follow national regulation for work with chemical agents.

German legislation on water endangering substances VwVwS - Water contaminating class (Germany): 1 (self classified)

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out by the Manufacturer of this product.



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SECTION 16. OTHER INFORMATION

Legend

ADR: European Agreement concerning the International Carriage of Dangerous Goods

by Road

CAS: Chemical Abstract Services

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substances and mixtures EC: European Community

EC50: Effective Concentration 50% EEC: European Economic Community

EINECS: European Inventory of Existing Commercial chemical Substances

EN: European Standard EU: European Union

HSDB: Hazardous Substances Data Bank IATA: International Air Transport Association

IBC: Intermediate Bulk Container

ICAO: International Civil Aviation Organisation IMDG: International Maritime Dangerous Goods

LC: Lethal Concentration

LD: Lethal Dose

NOEC: No observable effect concentration

OECD: Organisation for Economic Co-operation and Development

OEL: National occupational exposure limits

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

RTECS: Registry of Toxic Effects of Chemical Substances

SCBA: Self-Contained Breathing Apparatus

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit TWA: Time Weighted Average WEL: Workplace Exposure Limit

Information Source

: 1. Material Safety Data Sheet from manufacturer.

2. Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2019

(Chempendium, RTECs, HSDB, INCHEM).

3. European Chemicals Agency, Classification Legislation, 2019.

4. OECD - The Global Portal to Information on Chemical Substances - eChemPortal,

2019.

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Eye irritation; Expert judgement

H-phrases (full-text)

H225 - Highly flammable liquid and vapour.

H301 - Toxic if swallowed.

H311 - Toxic in contact with skin.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H331 - Toxic if inhaled.

H341 - Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H350 - May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H351 - Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>.

H370 - Causes damage to organs (a,b,c).

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

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