Parker Hannifin Ltd., Seal Group
Chomerics Division Europe
Unit 6 Century Point Halifax Road
High Wycombe Bucks, HP12 3SL
United Kingdom
Telephone: 044 (0) 1494 455 400

SDS Revision Date (dd/mm/yyyy): 03/05/2021
Revision No.: 5

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® 1038**

Product Code(s) : 50-01-1038-0000; 50-01-1038-0002; 50-02-1038-0000; 50-02-1038-0002; 50-02-1038-1000; 50-14-1038-0000; 50-31-1038-0000; 50-33-1038-0000

SDS No. : PHC-046 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 -)United States of America

Poisons Information Centre
The United Kingdom +44 121 507 4123
France Germany Netherlands + 33 3 83 85 21 92

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 - silver. 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.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. 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)

SAFETY DATA SHEET

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

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

Signal word:
Warning!

Hazard statements:
H319 - Causes serious eye irritation.

Precautionary statements:
P264 - Wash hands and face thoroughly after handling.
P280 - Wear 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(s) above reportable levels which are considered to be persistent, bioaccumulating nor toxic (PBT), or very persistent and very bioaccumulating (vPvB). See Section 12 for more environmental information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

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

The following substances shall be indicated according to legislation:

Substance name	CAS No	EC No.	Reach Registration No.	% Weight	Classification according to Regulation (EC) nr. 1272/2008	SCL, M-factor, ATE
Copper	7440-50-8	231-159-6	Not applicable.	**65.0 - 80.0**	not hazardous. Substances for which there are Member Country workplace exposure limits.	Not applicable

SAFETY DATA SHEET

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

Polydimethylsiloxane	70131-67-8	Polymer	Not applicable.	**10.0 - 20.0**	Eye Irrit. 2; H319 (self classified)	Not applicable
silver	7440-22-4	231-131-3	Not applicable.	**5.0 - 10.0**	not hazardous. Substances for which there are Community workplace exposure limits.	Not applicable
Xylene	1330-20-7	215-535-7	Not applicable.	**1.0 - 5.0**	Flam. Liq. 3; H226 *Acute Tox. 4; H312 *Acute Tox. 4; H332 Skin Irrit. 2; H315	Not applicable
Trimethoxymethylsilane	1185-55-3	214-685-0	Not applicable.	**0.4 - 1.2**	Flam. Liq. 2; H225 Eye Irrit. 2; H319 (self classified)	Not applicable
Ethylbenzene	100-41-4	202-849-4	Not applicable.	**0.5 - 1.5**	Flam. Liq. 2; H225 *Acute Tox. 4; H332 STOT RE 2; H373 (hearing organs) Asp. Tox. 1; H304	Not applicable
Methanol	67-56-1	200-659-6	Not applicable.	**0.02 - 0.14**	Flam. Liq. 2; H225 *Acute Tox. 3; H301 *Acute Tox. 3; H311 *Acute Tox. 3; H331 STOT SE 1; H370	Not applicable
The following ingredient may be released from the product only when heated above 150°C:						
formaldehyde	50-00-0	200-001-8	T;R23/24/25, C;R34, Carc.Cat.3; R40, Xi;R43	**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; H317	S: (1/2)-26-36/37/39-45-51

SAFETY DATA SHEET

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

*The above CLP Acute toxicity Classifications for the following chemicals are 'Minimum Classifications': Methanol; formaldehyde; Xylene; Ethylbenzene.

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 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.

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

SAFETY DATA SHEET

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

: 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; Hydrocarbons.

5.3 Advice for firefighters

Protective equipment for fire-fighters

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

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.

.

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

SAFETY DATA SHEET

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

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Exposure Limits:

Chemical Name	Exposure Limits	Type	Notes
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.
	0.2 mg/m³ (TWA)	Poland (OEL)	None.
	0.2 mg/m³ (fumes); 1 mg/m³ (dust) (TWA)	Spain (OEL)	None.
	0.2 mg/m³ (fumes); 1 mg/m³ (dust) (TWA) 2 mg/m³ (dust) (STEL)	The United Kingdom (WELs)	None.
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.
	0.1 mg/m³ (TWA)	Italy (OEL)	None.
	0.05 mg/m³ (TWA)	Poland (OEL)	None.
	0.1 mg/m³ (TWA)	Spain (OEL)	None.
	0.1 mg/m³ (TWA)	Slovak Republic (OEL)	
	0.1 mg/m³ (TWA)	The United Kingdom (WELs)	None.
Xylene	50 ppm (221 mg/m³) (TWA) 100 ppm (442 mg/m³) (STEL)	European Union (OEL)	Possibility of significant uptake through the skin
	50 ppm (220 mg/m³) (TWA) 100 ppm (440 mg/m³) (STEL)	Finland (OEL)	Potential for cutaneous absorption
	50 ppm (221 mg/m³) (TWA) 100 ppm (442 mg/m³) (STEL)	France (OEL)	Risk of cutaneous absorption
	100 ppm (440 mg/m³) (exposure factor 2) (TWA)	Germany (OEL)	Skin notation

SAFETY DATA SHEET

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

	221 mg/m³ (TWA) 442 mg/m³ (STEL)	Hungary (OEL)	Potential for cutaneous absorption
	50 ppm (221 mg/m³) (TWA) 100 ppm (442 mg/m³) (STEL)	Italy (OEL)	Skin - Potential for cutaneous absorption
	25 ppm (108 mg/m³) (TWA)	Hungary (OEL)	Skin notation
	100 mg/m³ (TWA)	Poland (OEL)	Skin notation
	50 ppm (221 mg/m³) (TWA) 100 ppm (442 mg/m³) (STEL)	Spain (OEL)	Skin - Potential for cutaneous absorption
	50 ppm (221 mg/m³) (mixed isomers, pure) (TWA) 100 ppm (442 mg/m³) (pure) (STEL)	Slovak Republic (OEL)	
	50 ppm (220 mg/m³) (TWA) 100 ppm (441 mg/m³) (STEL)	The United Kingdom (WELs)	Potential for cutaneous absorption
Trimethoxymethylsilane	None known.	European Union (OEL)	None.
Ethylbenzene	100 ppm (442 mg/m³) (TWA) 200 ppm (884 mg/m³) (STEL)	European Union (OEL)	Possibility of significant uptake through the skin
	50 ppm (220 mg/m³) (TWA) 200 ppm (880 mg/m³) (STEL)	Finland (OEL)	Potential for cutaneous absorption
	20 ppm (88.4 mg/m³) (TWA) 100 ppm (442 mg/m³) (STEL)	France (OEL)	Risk of cutaneous absorption
	20 ppm (88 mg/m³) (exposure factor 2) (TWA)	Germany (OEL)	Skin notation
	442 mg/m³ (TWA) 884 mg/m³ (STEL)	Hungary (OEL)	Potential for cutaneous absorption
	100 ppm (442 mg/m³) (TWA) 200 ppm (884 mg/m³) (STEL)	Italy (OEL)	Skin - Potential for cutaneous absorption
	200 mg/m³ (TWA) 400 mg/m³ (STEL)	Poland (OEL)	Skin notation
	100 ppm (441 mg/m³) (TWA) 200 ppm (884 mg/m³) (STEL)	Spain (OEL)	Skin - Potential for cutaneous absorption
	100 ppm (442 mg/m³) (TWA) 200 ppm (884 mg/m³) (STEL)	Slovak Republic (OEL)	
	100 ppm (441 mg/m³) (TWA) 125 ppm (552 mg/m³) (STEL)	The United Kingdom (WELs)	Potential for cutaneous absorption
Methanol	200 ppm (260 mg/m³) (TWA)	European Union (OEL)	Possibility of significant uptake through the skin

SAFETY DATA SHEET

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

	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 mg/m³ (TWA) 300 mg/m³ (STEL)	Poland (OEL)	Skin notation
	200 ppm (266 mg/m³ (TWA)	Spain (OEL)	Skin - Potential for cutaneous absorption
	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
	0.5 mg/m³ (TWA) 1 mg/m³ (STEL)	Poland (OEL)	Skin notation
	0.3 ppm (0.37 mg/m³) (STEL)	Spain (OEL)	None.
	2 ppm (2.5 mg/m³) (TWA) 2 ppm (2.5 mg/m³) (STEL)	The United Kingdom (WELs)	None.

Biological Exposure Indices:

Chemical Name	Biological Exposure Indices	Type
Xylene	650 mmol/mol Creatinine, Determinant: Methylhippuric acid, Specimen: Urine	UK. EH40 Biological Monitoring Guidance Values (BMGVs)
	1 g/g Creatinine, Determinant: Methylhippuric acid, Specimen: Urine	Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4
	1.5 mg/L, Determinant: Xylene, Specimen: Blood 2000 mg/L, Determinant: Methylhippuric(tolur-) acid, Specimen: Urine	Germany. TRGS 903, BAT List (Biological Limit Values)
	5 mmol/L ,Determinant: Methylhippuric acid, Specimen: Urine	Finland. HTP-arvot, App 2, Biological Limit Values, (BRA/BGV), Social Affairs and Ministry of Health

SAFETY DATA SHEET

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

	1500 mg/g Creatinine, Determinant: Methylhippuric acid, Specimen: Urine	France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)
	1500 mg/g Creatinine, Determinant: Methylhippuric acid, Specimen: Urine 860 µmol/mmol Creatinine, Determinant: Methylhippuric acid, Specimen: Urine	Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices
Ethylbenzene	700 mg/g Creatinine, Determinant: Mandelic acid plus Phenylglyoxylic acid, Specimen: Urine	Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4
	300 mg/g, Determinant: Mandelic acid plus Phenylglyoxylic acid, Specimen: Urine	Germany. TRGS 903, BAT List (Biological Limit Values)
	5.2 mmol/L, Determinant: Mandelic acid, Specimen: Urine	Finland. HTP-arvot, App 2, Biological Limit Values, (BRA/BGV), Social Affairs and Ministry of Health
	1500 mg/g Creatinine, Determinant: Mandelic acid (Non-specific (observed after the exposure to other substances)), Specimen: Urine	France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)
	1500 mg/g Creatinine, Determinant: Mandelic acid, Specimen: Urine 1110 µmol/mmol Creatinine, Determinant: Mandelic acid, Specimen: Urine	Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices
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)

No biological exposure limits noted for the ingredient(s).

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.

SAFETY DATA SHEET

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

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state : paste - silver
Colour : Silver
Odour : mild
Odour threshold : No information available.
pH : No information available.
Flash point : None.
Flashpoint (Method) : No information available.
Lower flammable limit (% by vol.)

: No information available.

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

SAFETY DATA SHEET

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

Volatile organic Compounds (VOC's)
: 111 g/L

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; Hydrocarbons

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.

Carcinogenicity : Not classifiable as a human carcinogen.
Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde is classified as carcinogenic.

Reproductive toxicity : Not classifiable as a reproductive toxin.

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

SAFETY DATA SHEET

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

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

Potential Chronic Health Effects

: 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.

Chemical name	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (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)
Xylene	6350 ppm (27.6 mg/L) (vapour)	3253 mg/kg	12 180 mg/kg
Trimethoxymethylsilane	> 51.4 mg/L (vapour)	> 9500 mg/kg	> 9500 mg/kg
Ethylbenzene	4000 ppm (17.4 mg/L) (vapour)	3500 mg/kg	15 380 mg/kg
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 product only when heated above 150°C:			
formaldehyde	287 ppm	800 mg/kg (rat) The estimated human lethal dose is: 317 - 475 mg/kg	300 mg/kg

SAFETY DATA SHEET

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

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.

Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		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.
Xylene	1330-20-7	8.2 mg/L (Rainbow trout)	No information available.	None.
Trimethoxymethylsilane	1185-55-3	> 110 mg/L (Rainbow trout) (hydrolysis product and/or parent compound)	No information available.	None.
Ethylbenzene	100-41-4	4.2 mg/L (Rainbow trout)	1.13 mg/L (30 days) (QSAR)	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.

SAFETY DATA SHEET

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

Ingredients	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.
Xylene	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	No information available.	None.
Trimethoxymethylsilane	1185-55-3	> 122 mg/L (Daphnia magna) (hydrolysis product and/or parent compound)	No information available.	None.
Ethylbenzene	100-41-4	1.81 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.

Ingredients	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.
Xylene	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	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.
Ethylbenzene	100-41-4	3.6 mg/L/96hr (Green algae)	3.4 mg/L/96hr	None.
Methanol	67-56-1	22 000 mg/L/96hr (Green algae)	N/Av	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 considered to be inherently biodegradable: Xylene; Ethylbenzene.
Contains the following chemicals which are not readily biodegradable: Copper; silver; Trimethoxymethylsilane.

12.3 Bioaccumulation potential

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

SAFETY DATA SHEET

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

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Xylene (CAS 1330-20-7)	3.12 - 3.2	50 - 58
Trimethoxymethylsilane (CAS 1185-55-3)	- 0.67	3.16
Ethylbenzene (CAS 100-41-4)	3.15	1.1 - 1.5
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 product itself has not been tested.

12.5 Results of PBT and vPvB assessment

: This mixture contains no substance(s) above reportable levels which are considered to be persistent, bioaccumulating nor toxic (PBT), or very persistent and very bioaccumulating (vPvB).

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.

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.

SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	14.1 UN Number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing Group	*Label*
ADR/RID	None.	not regulated	not regulated	none	
ADR/RID Additional information	Not classified as dangerous for conveyance in the meaning of the regulations for the transport of dangerous goods by road and rail.				
ICAO/IATA	None.	Not regulated.	not regulated	none	

SAFETY DATA SHEET

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

ICAO/IATA Additional information	None.				
IMDG	None.	Not regulated.	not regulated	none	
IMDG Additional information	None.				

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

: 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)
Xylene (CAS # 1330-20-7)
Trimethoxymethylsilane (CAS # 1185-55-3)
Ethylbenzene (CAS # 100-41-4)
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)
Ethylbenzene (CAS # 100-41-4)

SAFETY DATA SHEET

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

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.

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.

Preparation Date (dd/mm/yyyy)

: 28/10/2019

Reviewed Date SDS (dd/mm/yyyy)

: 03/05/2021

Revision No. : 5

Parker Hannifin Ltd., Seal Group
Chomerics Division Europe
Unit 6 Century Point Halifax Road
High Wycombe Bucks, HP12 3SL
United Kingdom
Telephone: 044 (0) 1494 455 400

SDS Revision Date (dd/mm/yyyy): 03/05/2021
Revision No.: 5

SAFETY DATA SHEET

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

Revision Information : (M)SDS sections updated:

3. COMPOSITION/INFORMATION ON INGREDIENTS;
11. TOXICOLOGICAL INFORMATION;
12. ECOLOGICAL INFORMATION
15. REGULATORY INFORMATION

Regulation and Procedure :

Serious eye damage/eye irritation ;Expert judgement

H-phrases (full-text)

H225 - Highly flammable liquid and vapour.
H226 - Flammable liquid and vapour.
H301 - Toxic if swallowed.
H304 - May be fatal if swallowed and enters airways.
H311 - Toxic in contact with skin.
H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H331 - Toxic if inhaled.
H332 - Harmful 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).
H373 - May cause damage to organs (a,b,c) through prolonged or repeated exposure.
H413 - May cause long lasting harmful effects to aquatic life.

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared for:

Parker Hannifin Corp.
77 Dragon Court
Woburn, MA, USA 01888
Telephone: 001-781-935-4850
http://www.parker.com
Direct all enquiries to Parker Hannifin.

Prepared by:

ICC The Compliance Center Inc.
http://www.thecompliancecenter.com

DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Parker Hannifin

SAFETY DATA SHEET

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

Corporation and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Parker Hannifin Corporation expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Parker Hannifin Corporation.

END OF DOCUMENT