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

SDS Revision Date (dd/mm/yyyy): 25/08/2025
Revision No.: 6

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 UK REACH Regulation.

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

1.1 Product identifier : **CHO-BOND® 584**

Product Code(s) : 50-00-0584-0208

UFI-4640-J0PA-0004-KJR8

SDS No. : PHC-049 EU

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

: Silver-filled conductive epoxy.
Use pattern: professional use.
Refer to restrictions found in REACH Annex XVII item 75.

1.3 Details of the supplier of the safety data sheet:

Parker Hannifin Ltd.
Engineered Materials Group
Chomerics Division Europe
Unit 6 Century Point
Halifax Road
High Wycombe
Bucks, HP12 3SL
United Kingdom
E-mail: chomerics_europe@parker.com
Website: www.chomerics.com
Telephone: 044 (0) 1494 455 400

Parker Hannifin Manufacturing France SAS
ZAC des Epineaux
7 avenue Louis Blériot
95740 Frépillon, France
Telephone : 033 (01) 34 32 39 00
Email: parker.france@parker.com
Website: www.parkerfrance.fr

Telephone : 044 (0) 1494 455 400

1.4 Emergency Telephone Number

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: +1 (352) 323-3500 (INFOTRAC - United States of America
Poisons Information Centre
Germany +4930184120
The Netherlands +31887558561
Norway Telefon: 22 59 13 00
Beskrivelse: Giftinformasjonen
Telefon: 110
Beskrivelse: Brannvesenet
Telefon: 112
Beskrivelse: Politiet
Telefon: 113
Beskrivelse: Medisinsk nødhjelp
Romania +40213183606
Czech Republic +420 267 082 236, +420 267 082 230, +420 267 082 229
Sweden +46104566750
Spain +34 917689800
Portugal + 35 12 13 30 3271
The United Kingdom NHS 111
France + 33 3 83 85 21 92
Italy
06 68593726 (CAV “Osp. Pediatrico Bambino Gesu” Dip. Emergenza - Roma) 800 183459 (Az. Osp. Univ. Foggia - Foggia)
081 5453333 (Az. Osp. "A. Cardarelli" - Napoli)
06 49978000 (CAV Policlinico "Umberto I" - Roma)
06 3054343 (CAV Policlinico "A. Gemelli" - Roma)
055 7947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica - Firenze)
0382 24444 (CAV Centro Nazionale di Informazione Tossicologica - Pavia) 02 66101029 (Osp. Niguarda Ca' Granda - Milano)
800 883300 (Azienda Ospedaliera Papa Giovanni XXII - Bergamo)

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

Liquid - silver. Mild odour.

Most important hazards:
Excessive heating above 50°C / 122°F may degrade the resin component. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing genetic defects. Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS.
Toxic to aquatic life with long lasting effects. See Section 12 for more environmental information.

This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:
Skin corrosion/irritation - Category 2; H315
Eye damage/irritation - Category 2; H319
Skin sensitization - Category 1; H317
Germ cell mutagenicity - Category 2; H341
Reproductive toxicity- Category 2;H361f
Specific target organ toxicity, repeated exposure Category 2 ; H373
Acute aquatic toxicity-Category 1;H400
Chronic aquatic hazard - Category 1 H410
Supplemental Hazard Statements
EUH381 - Suspected of causing endocrine disruption in humans

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2.2 Label elements

Hazard pictogram(s)



Hazardous components which must be listed on the label: Silver;Reaction product: bisphenol-A-(epichlorohydrin) ; 2,3-epoxypropyl o-tolyl ether.

Signal word:
Warning!

Hazard statements:
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H317 - May cause an allergic skin reaction.
H341 - Suspected of causing genetic defects.
H361f - Suspected of damaging fertility.
H373 -May cause damage to organs through prolonged or repeated exposure.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements
EUH381 - Suspected of causing endocrine disruption in humans

Precautionary statements:
P201 - Obtain special instructions before use.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/clothing and eye/face protection.
P308 + P313 - IF exposed or concerned: Get medical advice/attention.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

Other hazards which do not result in classification:
Excessive heating above 50°C / 122°F may degrade the resin component. May release peroxides on exposure to light and air, or on contact with incompatibles. Rate of peroxide formation is not known. Burning produces obnoxious and toxic fumes. May cause endocrine disruption. Mild respiratory irritant. Inhalation of fumes may result in metal fume fever, a flu-like illness. 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.

Endocrine disrupting properties: May cause endocrine disruption.

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

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature - Mixture of: Inorganic substances in powdered form; Epoxy resin; Ether.

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
silver	7440-22-4	231-131-3	Present	**65.0 - 75.0**	Repr. 2 H361f; STOT RE 2 H373; Aquatic Acute 1 H400; Aquatic Chronic 1 H410	M-Factor =10
Reaction product: bisphenol-A-(epichlorohydrin)	25068-38-6	500-033-5	Present	**20.0 - 30.0**	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411 ED HH 2; EUH381	Not applicable.
2,3-epoxypropyl o-tolyl ether	2210-79-9	218-645-3	Present	**5.0 - 8.0**	Skin Irrit. 2; H315 Skin Sens. 1; H317 Muta. 2; H341 Aquatic Chronic 2; H411	Not applicable.

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 a person who is unconscious or is having convulsions. IF exposed or concerned: Get medical attention/advice.

Inhalation : If breathed in, move person into fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stops, provide artificial respiration. IF exposed or concerned: Get medical attention/advice.

Skin contact : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it 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

: Wear protective gloves and eye/face protection.

4.2 Most important symptoms and effects, both acute and delayed

: Causes skin irritation. Contact may cause redness, swelling and a painful sensation. Causes serious eye irritation. Symptoms may include severe pain, tearing, redness, swelling and blurred vision.
May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.
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.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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; Water spray .

Unsuitable extinguishing media

: None known.

5.2 Special hazards arising from the substance or mixture

: Not considered flammable. However, may burn if exposed to extreme heat and flame. After prolonged storage, may release explosive peroxides in the presence of air. Rate of peroxide formation is not known. 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; Metal oxides; formaldehyde; Phenol; Aldehydes; Other unidentified organic compounds.

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

: Keep people away from and upwind of spill/leak. Wear appropriate protective equipment.

6.2 Environmental precautions

: Avoid release to the environment. Prevent product from entering drains, sewers, waterways and soil.

6.3 Methods and material for containment and cleaning up

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: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. 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

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.
Ensure adequate ventilation. Wear suitable protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Avoid breathing dust, mist or vapours. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and direct flame. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

7.2 Conditions for safe storage, including any incompatibilities

: Store in cool/well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Do not store near any incompatible materials (see Section 10).

7.3 Specific end use(s) : Filled Epoxy Kit

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Exposure Limits:

Chemical Name	Exposure Limits	Type	Notes
silver			
	0.1 mg/m³ (TWA)	European Union (OEL)	None.
	0.01 mg/m³ (dust) (TWA)	Denmark (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.
	0.1 mg/m³ (TWA)	Netherlands (OEL)	None.
	0.05 mg/m³ (TWA)	Poland (OEL)	None.

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	0.1 mg/m³ (TWA)	Portugal (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.
Reaction product: bisphenol-A-(epichlorohydrin)			
	N/Av	European Union (OEL)	N/Av
2,3-epoxypropyl o-tolyl ether			
	None known.	European Union (OEL)	None.
	N/Av	Germany (OEL)	N/Av

Biological Exposure Indices:

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

Derived No Effect Level (DNEL):
(CAS 7440-22-4) general population inhalation systemic effects long term exposure 0.04 mg/m3; workers inhalation systemic effects long term exposure 0.1 mg/m3 ; general population oral systemic effects long term exposure 1.2 mg/kg bw/day
(CAS 2210-79-9) general population oral systemic effects long term exposure 3 mg/kg; workers dermal systemic effects long term exposure 6 mg/kg bw/day ; workers inhalation systemic effects long term exposure 21.12 mg/m3; workers inhalation systemic effects acute/short term exposure 42.24 mg/m3
Predicted No Effect Concentration (PNEC):
(CAS 7440-22-4) 0.04 µg/L (freshwater); 0.86 µg/L (marine water); 438.13 mg/kg (sediment (freshwater)); 438.13 mg/kg (sediment (marine water); 0.025 mg/L (sewage treatment); 1.41 mg/kg (soil)
(CAS 2210-79-9) 2.8 µg/L (freshwater); 0.28 µg/L (marine water); 28 µg/L (freshwater (intermittent releases); 0.039 mg/kg (sediment (freshwater); 0.0039 mg/kg (sediment (marine water); 10 mg/L (sewage treatmen); 0.012 mg/kg (soil)

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 : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. Advice should be sought from respiratory protection specialists.

Skin protection : Wear protective gloves/clothing. 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 resistant clothing and boots.

Eye / face protection : Wear eye/face protection. Chemical splash goggles are recommended. A full face shield may also be necessary. See also EN 166.

Other protective equipment
: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations

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: Avoid breathing dust, mist or vapours. 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. Contaminated work clothing should not be allowed out of the workplace.

8.3 Environmental exposure controls

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state : Liquid - silver
Colour : Silver
Odour : mild
Odour threshold : No information available.
pH : No information available.
Flash point : > 93.3°C
Flashpoint (Method) : closed cup
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.
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
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) : No information available.
Volatile organic Compounds (VOC's)
: No information available.

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Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity : Not normally reactive.

10.2 Chemical stability : Stable under normal conditions. After prolonged storage, may release explosive peroxides in the presence of air. Rate of peroxide formation is not known.

10.3 Possibility of hazardous reactions

: Hazardous polymerization does not occur.

10.4 Conditions to avoid : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

10.5 Incompatible materials

: Strong oxidizing agents; Strong acids; Strong bases; Amines; Mercaptans

10.6 Hazardous decomposition products

: Peroxides
Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; Metal oxides; formaldehyde; Phenol; Aldehydes; Other unidentified organic compounds.

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 : This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:
Skin corrosion/irritation - Category 2. Causes skin irritation.

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 serious eye irritation.

Respiratory or skin sensitisation

: This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:
Skin sensitization - Category 1. May cause an allergic skin reaction.
May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.
Not expected to be a respiratory sensitizer.

Germ cell mutagenicity : This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:
Germ cell mutagenicity - Category 2. Suspected of causing genetic defects.
Contains: 2,3-epoxypropyl o-tolyl ether (o-Cresyl glycidyl ether). o-Cresyl glycidyl ether induced a reproducible, dose-related increase in the His+ revertant frequency in Salmonella tester strains TA1535 and TA100, without rodent liver S9 metabolic activation. Therefore, the test substance is considered a direct-acting gene-mutagen in Salmonella under the conditions of the study. These positive findings suggest that the test substance induced repairable DNA damage in human lymhpocytes.

Carcinogenicity : Contains no ingredient listed as a carcinogen

Reproductive toxicity : Reproductive toxicity -Category 2.Suspected of damaging fertility.

STOT-single exposure : According to the classification criteria of the European Union, this product is not expected to cause target organ toxicity through repeated doses.

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STOT-repeated exposure : Specific target organ toxicity, repeated exposure -Category 2.May cause damage to organs through prolonged or repeated exposure.

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.

Skin contact: Causes skin irritation. Contact may cause redness, swelling and a painful sensation.

Eye contact: Causes serious eye irritation. Symptoms may include severe pain, tearing, redness, swelling and blurred vision.

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

Potential Chronic Health Effects

: Not available.

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)
silver	> 5.16 mg/L (dust) (No mortality)	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)
Reaction product: bisphenol-A-(epichlorohydrin)	No information available.	11 400 mg/kg	> 2000 mg/kg (No mortality)
2,3-epoxypropyl o-tolyl ether	> 6.09 mg/L (mist)	> 5000 mg/kg	> 2000 mg/kg (No mortality)

11.2 Information on other Hazards

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

11.2.1 Endocrine disrupting properties :May cause endocrine disruption. 11.2.2 Other hazards:none

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity : Very toxic to aquatic life with long lasting effects. No data is available on the product itself. The product contains the following substances which are hazardous for the environment: Silver; Reaction product: bisphenol-A-(epichlorohydrin) ; 2,3-epoxypropyl o-tolyl ether. Should not be released into the environment.

See the following tables for individual ingredient ecotoxicity data.

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Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
silver	7440-22-4	0.00155mg/L	N/Av	10
Reaction product: bisphenol-A-(epichlorohydrin)	25068-38-6	3.4 mg/L (Rainbow trout)	No information available.	None.
2,3-epoxypropyl o-tolyl ether	2210-79-9	2.8 - 5.1 mg/L (Rainbow trout)	No information available.	None.

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
silver	7440-22-4	0.00024mg/L	N/Av	10
Reaction product: bisphenol-A-(epichlorohydrin)	25068-38-6	1.1 - 2.8 mg/L (Daphnia magna)	0.3 mg/L (Read-across)	None.
2,3-epoxypropyl o-tolyl ether	2210-79-9	16 mg/L (Daphnia magna)	No information available.	None.

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
silver	7440-22-4	N/Av	N/Av	None.
Reaction product: bisphenol-A-(epichlorohydrin)	25068-38-6	9.4 mg/L/72hr (Green algae) (Read-across)	2.8 mg/L/72hr (Read-across)	None.
2,3-epoxypropyl o-tolyl ether	2210-79-9	5.1 mg/L/72hr (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: silver; Reaction product: bisphenol-A-(epichlorohydrin); 2,3-epoxypropyl o-tolyl ether.

12.3 Bioaccumulation potential

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

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Reaction product: bisphenol-A-(epichlorohydrin) (CAS 25068-38-6)	> 2.915	31
2,3-epoxypropyl o-tolyl ether (CAS 2210-79-9)	2.5	No information available.

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 considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Endocrine disrupting properties

: Not applicable

12.7 Other Adverse Environmental effects

: No additional information.

12.8 Additional information : Not applicable

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 : Empty containers retain residue (liquid and/or vapour) and can be dangerous. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not allow this material to drain into sewers/water supplies.
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

SAFETY DATA SHEET

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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	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)	9	III	
EU ADR/RID Classification Code	M6 - Pollutant to the aquatic environment, liquid				
EU ADR / RID Hazard Identification Number	90 - environmentally hazardous substance; miscellaneous dangerous substances				
ADR/RID Additional information	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. The environmentally hazardous substance mark must appear on packagings holding more than 5 litres of the material. Tunnel Code: 3 (-)				
ICAO/IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Silver)	9	III	
ICAO/IATA Additional information	Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material. The environmentally hazardous substance mark must appear on packagings holding more than 5 litres of the material.				
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)	9	III	
IMDG Additional information	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. The environmentally hazardous substance mark must appear on packagings holding more than 5 litres of the material. EmS No. F-A-S-F				

14.5 Environmental hazards : This product meets the criteria for an environmentally hazardous material 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. Avoid release to the environment.

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

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

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 UK REACH Regulation.

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

Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:
None of the components are specifically listed.

Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended
Refer to restrictions found in REACH Annex XVII item 75.

Directive 2012/18/EU (Seveso III) on the control of major-accident hazards involving dangerous substances:
None.

Directive 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work:
Reaction product: bisphenol-A-(epichlorohydrin) (CAS # 25068-38-6)
2,3-epoxypropyl o-tolyl ether (CAS # 2210-79-9)
Silver (7440-22-4)

Directive 94/33/EC on the protection of young people at work:
Reaction product: bisphenol-A-(epichlorohydrin) (CAS # 25068-38-6)
2,3-epoxypropyl o-tolyl ether (CAS # 2210-79-9)
Silver (7440-22-4)
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended [including Regulation (EU) 2020/878].

Follow national regulation for work with chemical agents.

German legislation on water endangering substances AWSV - Water contaminating class (Germany): 3 (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
ATE: Acute Toxicity Estimate
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
EN: European Standard
ERG: Emergency Response Guidebook
EU: European Union
IATA: International Air Transport Association
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
PEL: Permissible exposure limit
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL: Short Term Exposure Limit
TWA: Time Weighted Average

Information Source : 1. Material Safety Data Sheet from manufacturer.
2. Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases
3. European Chemicals Agency, Classification Legislation

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Revision No. : 6

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Regulation and Procedure :

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 UK REACH Regulation.

Based on expert judgement:
Skin irritation
Eye irritation
Skin sensitization
Germ cell mutagenicity
Reproductive toxicity
Specific Target Organ Toxicity, Repeated Exposure.
Aquatic toxicity

H-phrases (full-text)
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H361f - Suspected of damaging fertility.
H341 - Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373 - May cause damage to organs (a,b,c) through prolonged or repeated exposure.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
H411 - Toxic to aquatic life with long lasting effects.

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared for: Parker Hannifin Corp. Chomerics Division 77 Dragon Court Woburn, MA, U.S.A. 01888 Telephone: (781) 935-4850	
Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com	

DISCLAIMER

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