

SDS No PHC-330 EU

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 1 of 14

# 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-SEAL® 1298 Conductive Fluorosilicone Elastomer

(Cured)

Product Code(s) : 1298

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

: Conductive elastomer / EMI Shielding.

Use pattern: professional use - Electronics industry.

No restrictions on use known.

1.3 Details of the supplier of the safety data sheet:

Parker Hannifin Ltd., Seal 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

1.4 Emergency Telephone Number

: +1 (352) 323-3500 (INFOTRAC - United States of America)

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

Solid (Putty) - grev. No odour.

Most important hazards:

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. Avoid release to the environment. See Section 12 for more environmental information.

The product is not classified as hazardous according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

Hazard pictogram(s)

None required according to Regulation (EC) No. 1272/2008. Hazardous components which must be listed on the label: None required according to Regulation (EC) No. 1272/2008. Signal word:

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



Telephone: 044 (0) 1494 455 400

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 2 of 14

SDS No PHC-330 EU

## SAFETY DATA SHEET

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

Hazard statements:

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

Precautionary statements:

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

Supplemental Hazard Statements:

EUH210 - Safety data sheet available on request.

#### 2.3 Other hazards

Other hazards which do not result in classification:

When heated above 150°C in air, may release formaldehyde gas. Formaldehyde is an eye and throat irritant and acute toxicant. Formaldehyde may cause sensitisation by skin contact. Formaldehyde has shown limited evidence of a carcinogenic effect. Heating or fire can release toxic gas. May be mildly irritating to skin, eyes and respiratory system. Inhalation of fumes may result in metal fume fever, a flu-like illness. 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.

#### 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).

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical nature of the preparation: Material is a fully cured compound consisting of: Silver plated aluminium powder; Siloxanes; Fluorinated siloxanes; Inorganic substances in powdered form; Silicone polymer; silane compounds. 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	<u>SCL.</u> <u>M-factor,</u> <u>ATE</u>
Aluminium	7429-90-5	231-072-3	Not applicable.	50.0 - 60.0	Water-react. 2; H261 Pyr. Sol. 1; H250	Not applicable
Silver metal	7440-22-4	231-131-3	Not applicable.	7.0 - 13.0	not hazardous. Substances for which there are Community workplace exposure limits.	
Trifluoropropyl methyl cyclotetrasiloxane	429-67-4	207-060-9	Not applicable.	0.1 - 2.0	Acute Tox. 4; H302 Acute Tox. 4; H312 (self classified)	ATE oral = 138888.88 mg/kg



Telephone: 044 (0) 1494 455 400

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022 SDS No PHC-330 EU

Page 3 of 14

# SAFETY DATA SHEET

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

Octamethyltrisiloxane	107-51-7	203-497-4	Not applicable.	0.5 - 1.5	Flam. Liq. 3; H226 Aquatic Chronic 4; H413 (self classified)	Not applicable
The following ingredie only when heated above		I from the produ	ıct			
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; H317	Not applicable

Note: The above CLP Acute toxicity Classifications for the following chemicals are 'Minimum Classifications': 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

Inhalation

Ingestion : If in

: If ingested, 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.

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: For skin contact, wash with soap and water while removing contaminated clothing.

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

contaminated clothing before re-use.

*Eye contact* : Immediately flush eye(s) with plenty of water. When symptoms persist or in all cases

of doubt, seek medical advice.

## 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

: May be mildly irritating to skin, eyes and respiratory system. May cause coughing and breathing difficulties. Direct skin contact may cause temporary redness. Direct eye contact may cause temporary redness.

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 may cause sensitisation by skin contact. Formaldehyde may cause mutations to non-reproductive (somatic) cells, based on animal data. Formaldehyde is classified as carcinogenic.

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

: Provide general supportive measures and treat symptomatically.



SDS No PHC-330 EU

Page 4 of 14

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

# SAFETY DATA SHEET

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

#### SECTION 5. FIRE-FIGHTING MEASURES

# 5.1 Extinguishing media

Suitable extinguishing media

: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

: Water may cause spattering of hot material and may spread burning.

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

: Not considered flammable. During cure, vapours are released which may be harmful. 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; Hydrogen fluoride; Fluorocarbons; Sodium oxides; 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 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. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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. Avoid breathing fumes. Avoid contact with skin, eyes and clothing. Keep away from heat. Keep away from acids and other incompatibles. Keep container tightly closed. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Wash thoroughly after handling.



Telephone: 044 (0) 1494 455 400

SDS No PHC-330 EU

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 5 of 14

# SAFETY DATA SHEET

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

## 7.2 Conditions for safe storage, including any incompatibilities

: Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Protect against physical damage. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Do not store near any incompatible materials (see Section 10).

7.3 Specific end use(s) : Conductive elastomer / EMI Shielding

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## **8.1 Control Parameters**

<b>Chemical Name</b>	Exposure Limits	<u>Type</u>	<u>Notes</u>
Aluminium			
	10 mg/m³ (metal); 5 mg/m³ (dust) (TWA)	France (OEL)	None.
	6 mg/m³ (respirable dust) (TWA)	Hungary (OEL)	None.
	2.5 mg/m³ (inhalable dust and fume); 1.2 mg/m³ (respirable dust and fume) (TWA)	Poland (OEL)	None.
	10 mg/m³ (dust) (TWA)	Spain (OEL)	None.
	10 mg/m³ (inhalable); 4 mg/m³ (respirable dust) (TWA)	The United Kingdom (WELs)	None.
Silver metal			
	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)	The United Kingdom (WELs)	None.
Trifluoropropyl methyl cy	clotetrasiloxane		
	None known.	European Union (OEL)	None.
Octamethyltrisiloxane			
	None known.	European Union (OEL)	None.
	None known.	Italy (OEL)	None.
Formaldehyde			
	0.3 ppm (0.37 mg/m³) (TWA) 1 ppm (1.2 mg/m³) (STEL)	Finland (OEL)	None.



Telephone: 044 (0) 1494 455 400

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022 SDS No PHC-330 EU

Page 6 of 14

# SAFETY DATA SHEET

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

0.5 ppm (TWA) 1 ppm (STEL)	France (OEL)	None.
0.3 ppm (0.37 mg/m	n³) (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/m	n³) (STEL) Spain (OEL)	None.
2 ppm (2.5 mg/m³) ( 2 ppm (2.5 mg/m³) (		/ELs) None.

## **Biological Exposure Indices:**

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 quitable requirement.

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. Advice should be sought from respiratory protection specialists.

**Skin protection**: Gloves impervious to the material are recommended. 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. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Eye / face protection : Wear as appropriate: Safety glasses with side shields; Tightly fitting safety goggles.

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

: Avoid breathing fumes. 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.



CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 7 of 14

SDS No PHC-330 EU

# SAFETY DATA SHEET

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Physical state : solid (Putty) - grey

Colour : grey
Odour : No odour.

Odour threshold : No information available.

Plash point : No information available.

No information available.

No information available.

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 : > 1.0
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.

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. When heated above 150°C in air, may release

formaldehyde gas.



CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022 SDS No PHC-330 EU

Page 8 of 14

## SAFETY DATA SHEET

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

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

: Oxidizing agents; Acids; Bases; Reducing agents

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; Hydrogen fluoride; Fluorocarbons; Sodium oxides; 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. .? % of the mixture consists of

ingredient(s) of unknown toxicity.

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

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

considered as being an eye irritant.

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

refation of formalderlyde gas. I officialderly

**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

Contains no ingredient listed as toxic to reproduction.

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.

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.



CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022 SDS No PHC-330 EU

Page 9 of 14

## SAFETY DATA SHEET

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

#### 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: May cause mild eye irritation. Direct eye contact may cause temporary redness.

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

## **Potential Chronic Health Effects**

: 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

: Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde causes severe respiratory irritation, lung inflammation and pulmonary edema.

# **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.

	LC <sub>50</sub> (4hr)	LD₅	60
Chemical name	inh, rat	(Oral, rat)	(Rabbit, dermal)
Aluminium	No information available.	No information available.	No information available.
Silver metal	No information available.	> 2000 mg/kg	No information available.
Trifluoropropyl methyl cyclotetrasiloxane	No information available.	1540 mg/kg	> 1000, < 2000 mg/kg
Octamethyltrisiloxane	> 22.6 mg/L (vapour) (No mortality)	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)
he following ingredier	nt is 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

#### 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. The following ingredient(s) may be harmful to aquatic life:

This product also contains: Silver. The acute toxicity of silver to aquatic species varies drastically by the chemical form and correlates with the availability of free ionic silver. 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.



Telephone: 044 (0) 1494 455 400

SDS No PHC-330 EU

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 10 of 14

# SAFETY DATA SHEET

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

# Ecotoxicity data:

P			Toxicity to Fish	
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor
Aluminium	7429-90-5	No information available.	No information available.	None.
Silver metal	7440-22-4	No information available.	No information available.	None.
Trifluoropropyl methyl cyclotetrasiloxane	429-67-4	No information available.	No information available.	None.
Octamethyltrisiloxane	107-51-7	No information available.	No information available.	None.
Formaldehyde	50-00-0	6.7 mg/L (Striped bass)	≥ 48 mg/L/28-day (Japanese ricefish)	None.

<u>Ingredients</u>	CAS No	Тох	icity to Daphnia	
		EC50 / 48h	NOEC / 21 day	M Factor
Aluminium	7429-90-5	No information available.	No information available.	None.
Silver metal	7440-22-4	No information available.	No information available.	None.
Trifluoropropyl methyl cyclotetrasiloxane	429-67-4	No information available.	No information available.	None.
Octamethyltrisiloxane	107-51-7	No information available.	No information available.	None.
Formaldehyde	50-00-0	5.8 mg/L (Daphnia magna)	No information available.	None.

<u>Ingredients</u>	CAS No	То	xicity to Algae	
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Aluminium	7429-90-5	No information available.	No information available.	None.
Silver metal	7440-22-4	No information available.	No information available.	None.
Trifluoropropyl methyl cyclotetrasiloxane	429-67-4	No information available.	No information available.	None.
Octamethyltrisiloxane	107-51-7	No information available.	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: Aluminium; silver; Octamethyltrisiloxane; .

Octamethylcyclotetrasiloxane has a half-life in water of 37.5 days (Canadian Environmental Protection Agency). Octamethylcyclotetrasiloxane has a half life in sediment of > 728 days (Canadian Environmental Protection Agency).



Telephone: 044 (0) 1494 455 400

**CHO-SEAL® 1298 Conductive** Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022 SDS No PHC-330 EU

Page 11 of 14

# SAFETY DATA SHEET

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

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

<u>Components</u>	Partition coefficient n-octanol/water (log	<b>Bioconcentration factor (BCF)</b>
	Kow)	
Octamethyltrisiloxane (CAS 107-51-7)	6.6	3610; 5600 (Fish) (parent compound)
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 preparation 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.

Empty containers retain residue and can be dangerous. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**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		
ADR/RID	None	not regulated	not regulated	none	$\otimes$		
EU ADR/RID Classification Code	Not applicabl	ė.	'				
EU ADR / RID Hazard Identification Number	Not applicable.						
ADR/RID Additional information	Not classified a road and rail.	as dangerous for conveyance in the meaning of the re	gulations for the trar	sport of da	ngerous goods		



SDS No PHC-330 EU

**CHO-SEAL® 1298 Conductive** Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 12 of 14

## SAFETY DATA SHEET

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

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.				

**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. 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

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

## Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: None.

#### Restrictions on use

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

None applicable.

Directive 2012/18/EU (Seveso III) 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:

Aluminium (CAS # 7429-90-5)

Trifluoropropyl methyl cyclotetrasiloxane (CAS # 429-67-4)

Octamethyltrisiloxane (CAS # 107-51-7)

Directive 94/33/EC on the protection of young people at work: None of the components are specifically listed.



**CHO-SEAL® 1298 Conductive** Fluorosilicone Elastomer (Cured)

SDS Preparation Date (dd/mm/yyyy): 28/04/2022

SDS No PHC-330 EU

Page 13 of 14

# 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 substances that are hazardous to water AwSV: Water hazard class (Germany) 1self classified

## 15.2 Chemical safety assessment

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

#### SECTION 16. OTHER INFORMATION

Legend : ADR: European Agreement concerning the International Carriage of Dangerous Goods

by Road

**CAS: Chemical Abstract Services** 

EC: European Community

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

IUCLID: International Uniform Chemical Information Database

LC: Lethal Concentration

LD: Lethal Dose

OEL: National occupational exposure limits

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

RTECS: Registry of Toxic Effects of Chemical Substances

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

3. European Chemicals Agency, Classification Legislation

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

Preparation Date (dd/mm/yyyy)

28/04/2022

**Regulation and Procedure** 



SDS No PHC-330 EU

CHO-SEAL® 1298 Conductive Fluorosilicone Elastomer (Cured) SDS Preparation Date (dd/mm/yyyy): 28/04/2022

Page 14 of 14

## SAFETY DATA SHEET

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

#### H-phrases (full-text)

EUH210 - Safety data sheet available on request.

H226 - Flammable liquid and vapour.

H250 - Catches fire spontaneously if exposed to air.

H261 - In contact with water releases flammable gases.

H301 - Toxic if swallowed.

H302 - Harmful if swallowed.

H311 - Toxic in contact with skin.

H312 - Harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

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>.

H361f - Suspected of damaging fertility.

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 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