

CHO-THERM® 1642, Part B

SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

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-THERM® 1642, Part B
Product Code(s)	: 65-00-1642-0000; 65-00-1642-0000-SP/NP; 65-00-1642-0000NP; 69-11-30862-1642
SDS No.	: PHC-054 EU
1.2 Relevant identified uses	s of the substance or mixture and uses advised against
	: Sealant / Conductive adhesive.
	Use pattern: Electronics industry - professional use.
	No restrictions on use known.
1.3 Details of the supplie	er of the safety data sheet:
Parker Hannifin Ma	nufacturing France SAS
ZAC des Epineaux	
7 avenue Louis Blériot	
95740 Frépillon	
France	lear com
Email: parker.france@par Website: www.parkerfran	
Telephone	: 033 (01) 34 32 39 00
.4 Emergency Telephone N	
	: +1 (352) 323-3500 (INFOTRAC - U.S.)
	Poisons Information Centre
	Spain +34 917689800
	Italy +39 06 49901
	France + 33 3 83 85 21 92
.5 National Contact	
	: E-mail: chomerics_europe@parker.com
	Website: www.chomerics.com
SECTION 2. HAZARDS I	DENTIFICATION

2.1 Classification of the substance or mixture

liquid - blue. Mild 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. Toxic to aquatic life with long lasting effects. Avoid release to the environment. See Section 12 for more environmental information.

This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification: Chronic aquatic toxicity - Category 2; H411

2.2 Label elements

Hazard pictogram(s)



SDS No: PHC-054 EU

Page 1 of 14



CHO-THERM® 1642, Part B

SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

Revision No.:

SAFETY DATA SHEET

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

Signal word:

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

Hazard statements:

H411 - Toxic to aquatic life with long lasting effects. 20-30% of the mixture consists of ingredient(s) of unknown toxicity.

Precautionary statements:

P273 - Avoid release to the environment.

P391 - Collect spillage.

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

2.3 Other hazards

Other hazards which do not result in classification:

Burning produces obnoxious and toxic fumes. When heated above 150°C in air, may release formaldehyde gas. May cause mild respiratory irritation at higher temperatures. Direct eye contact may cause slight or mild, transient irritation. Direct skin contact may cause slight or mild, transient irritation. May cause gastrointestinal irritation. Contains cobalt compounds. Some cobalt compounds can cause allergic skin reactions, however, for olivine, cobalt silicate blue, allergic reactions are considered to be rare.

PBT assessment:

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature - Mixture of: Siloxanes; Pigment; Metal compounds.

The following substances shall be indicated according to legislation:

Substance name	<u>CAS No</u>	EC No.	<u>Reach</u> <u>Registration</u> <u>No.</u>	<u>% Weight</u>	Classification according to Regulation (EC) nr. 1272/2008	<u>SCL,</u> <u>M-factor,</u> <u>ATE</u>
Silicic acid, sodium salt, hydrolysis products with chlorotrimethylsilane and dichloroethenylmethyl silane	68584-83-8	271-545-1	Not applicable.	20.0 - 30.0	No information available.	Not applicable.
Olivine, cobalt silicate blue	68187-40-6	269-093-5	Not applicable.	< 20.0	Acute Tox. 4; H302 + H332 (self classified)	Not applicable.
Zinc oxide	1314-13-2	215-222-5	Present	0.1 - 1.0	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M-Factor =10
The following ingredie product only when he	-					

SDS No: PHC-054 EU

Page 2 of 14



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

formaldehyde	50-00-0	200-001-8	Present	Not known.	Carc. 1B; H350 Muta. 2; H341 *Acute Tox. 3; H301 *Acute Tox. 3; H311 *Acute Tox. 3; H331 Skin Corr. 1B;	Not applicable.
					H314 Skin Sens. 1; H317	

*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

	tinse mouth. Never give anything by mouth to an symptoms persist or in all cases of doubt, seek medical
Inhalation : If inhaled, move to fresh air	. If breathing is difficult, give oxygen by qualified medical has stopped, give artificial respiration. When symptoms
Skin contact : For skin contact, wash with	soap and water while removing contaminated clothing. in all cases of doubt, seek medical advice.
	y of water, also under the eyelids. Remove contact lenses, Vhen symptoms persist or in all cases of doubt, seek
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
	irritation at higher temperatures. May cause coughing and
	use slight or mild, transient irritation. Direct skin contact may
	se slight or mild, transient irritation. Symptoms may include
Ingestion may cause gastro When heated above 150°C eye and throat irritant and a skin contact. Formaldehyde	bintestinal irritation, nausea, vomiting and diarrhea. in air, may release formaldehyde gas. Formaldehyde is an acute toxicant. Formaldehyde may cause sensitisation by a may cause mutations to non-reproductive (somatic) cells, naldehyde is classified as carcinogenic.
	measures and treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

SDS No: PHC-054 EU

Page 3 of 14



CHO-THERM® 1642, Part B

SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

SAFETY DATA SHEET

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

: May release Hydrogen gas on contact with incompatible materials. Burning produces obnoxious and toxic fumes. When heated above 150°C in air, may release formaldehyde gas. The pressure in sealed containers can increase under the influence of heat. In the event of fire the following can be released: Carbon oxides; Metal oxides; formaldehyde; Silica; Silicon oxides

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 Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Wear appropriate protective equipment. 6.2 Environmental precautions Prevent product from entering drains, sewers, waterways and soil. Avoid release to the environment. 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. 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. 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.

7 1 Precautions for safe handling

The recondensions for sale manufi	
	Use with adequate ventilation. Wear suitable protective equipment during handling. 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. Keep containers closed when not in use. Wash thoroughly after handling. Avoid release to the environment. , including any incompatibilities
: 7.3 Specific end use(s) :	Store in cool/well-ventilated place. Inspect periodically for damage or leaks. Do not store near any incompatible materials (see Section 10). Adhesive / Sealant

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Exposure Limits:			
Chemical Name	Exposure Limits	<u>Type</u>	<u>Notes</u>

SDS No: PHC-054 EU

Page 4 of 14



SDS No: PHC-054 EU

Page 5 of 14

CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

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/m ³) (exposure factor 2) (TWA)	Germany (OEL)	Skin sensitiser Carc. 1B
	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 ³) (STEL)	Spain (OEL)	None.
	2 ppm (2.5 mg/m³) (TWA) 2 ppm (2.5 mg/m³) (STEL)	The United Kingdom (WELs)	None.
Dlivine, cobalt silicate blue			
	None known.	European Union (OEL)	None.
Silicic acid, sodium salt, hy	drolysis products with chlorotrimethyls	ilane and dichloroethenylm	nethylsilane
	None known.	European Union (OEL)	None.
Zinc oxide			
	2 mg/m³ (TWA) 10 mg/m³ (STEL)	Finland (OEL)	(fumes)
	5 mg/m³ (fumes); 10 mg/m³ (dust) (TWA)	France (OEL)	None.
	5 mg/m ³ (TWA) 20 mg/m ³ (STEL)	Hungary (OEL)	(respirable dust)
	5 mg/m³ (TWA) 10 mg/m³ (STEL)	Ireland (OEL)	(fumes)
	5 mg/m³ (TWA) 10 mg/m³ (STEL)	Poland (OEL)	(fumes)
	2 mg/m ³ (TWA)	Spain (OEL)	(respirable dust)

Biological Exposure Indices:

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

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



SDS No: PHC-054 EU

CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

Page 6 of 14

SAFETY DATA SHEET

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

	: Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. Good general ventilation (typically 10 air
	changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. In case of insufficient ventilation wear suitable respiratory equipment.
Respiratory protection	: In case of insufficient ventilation wear suitable respiratory equipment. 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. Seek advice from respiratory protection specialists.
Skin protection	: For prolonged or repeated contact use protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it. Wear sufficient clothing to prevent skin contact.
Eye / face protection	: Wear as appropriate: Tightly fitting safety goggles; Safety glasses with side shields See also EN 166.
Other protective equipme	ent
	: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.
General hygiene conside	rations
	: 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 exposu	
	: Avoid release to the environment.
SECTION 9. PHYSICAL A	ND CHEMICAL PROPERTIES

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: liqui	d - blue		
Colour	: blue			
Odour	: No c	odour.		
Odour threshold	: No ii	nformation available.		
рН	: No ii	nformation available.		
Flash point	: > 93	.3°C		
Flashpoint (Method)	: No ii	nformation available.		
Lower flammable limit (%	by vol.)		
	: No	information available.		
Upper flammable limit (%	by vol.)		
	: No i	nformation available.		
Auto-ignition temperature				
	: No ii	nformation available.		
Decomposition temperat	re			
	: No ii	nformation available.		
Oxidizing properties	: Non	e known.		
Explosive properties	: Not	explosive		
Initial boiling point and boiling range				
01	• No ii	nformation available.		



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

SDS No: PHC-054 EU

Page 7 of 14

SAFETY DATA SHEET

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

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-oo	ctai	nol/water
	:	No information available.
Viscosity	:	No information available.
Evaporation rate (BuAe =	= 1)	
	:	No information available.
Particle characteristics	:	Not applicable.

9.2 Other Information

Volatiles (% by weight) : negligible Volatile organic Compounds (VOC's) : No information available.

Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	: Not normally reactive.
10.2 Chemical stability	 Stable under normal conditions. When heated above 150°C in air, may release formaldehyde gas.
10.3 Possibility of hazardo	bus reactions
	 Hazardous polymerization does not occur. No dangerous reaction known under conditions of normal use.
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 materia	s
	: Strong oxidizing agents; Strong acids; Strong bases; Metal salts
10.6 Hazardous decompos	sition products
	None known.
	Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; Metal oxides; formaldehyde; Silica; Silicon oxides

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		

: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Respiratory or skin sensitisation



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

SAFETY DATA SHEET

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

Germ cell mutagenicity	 Not expected to be a skin or respiratory sensitizer. Contains cobalt compounds. Some cobalt compounds can cause allergic skin reactions, however, for olivine, cobalt silicate blue, allergic reactions are considered to be rare. Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde may cause sensitisation by skin contact. 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	: Contains no ingredient listed as a carcinogen Avoid heating, which will result in the liberation of formaldehyde gas. Formaldehyde has shown limited evidence of a carcinogenic effect.
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 Effects of acute exposure	: Eye contact; Skin contact; Inhalation; Ingestion
	Skin contact: Direct skin contact may cause slight or mild, transient irritation. Direct skin contact may cause temporary redness.
	Eye contact: May cause mild transient irritation. Symptoms may include stinging and tearing.
	Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Potential Chronic Health E	
Information on other Haza	: None known or reported by the manufacturer. rds
	: 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	 No data is available on the product itself. The calculated ATE values for this mixture are: ATE oral = 6538 mg/kg ATE inhalation (dust/mist) = 22.1 mg/L/4H
	See below for individual ingredient acute toxicity data.

SDS No: PHC-054 EU Page 8 of 14



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

	LC₅₀(4hr)	LD50		
<u>Chemical name</u>	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>	
Silicic acid, sodium salt, hydrolysis products with chlorotrimethylsilane and dichloroethenylmethylsilane	No information available.	No information available.	No information available.	
Olivine, cobalt silicate blue	> 5 mg/L (dust)	1480 mg/kg	No information available.	
Zinc oxide	> 5.7 mg/L (dust) (No mortality)	> 5000 mg/kg	> 2000 mg/kg (No mortality)	
he following ingredient	may be released from the pr	oduct only when heated a	above 150°C:	
formaldehyde	287 ppm	800 mg/kg (rat) The estimated human lethal dose is: 317 - 475 mg/kg	300 mg/kg	

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

: Toxic to aquatic life with long lasting effects. The product contains the following substances which are hazardous for the environment: Zinc oxide. Should not be released into the environment.

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

		Toxicity to Fish		
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor
Silicic acid, sodium salt, hydrolysis products with chlorotrimethylsilane and dichloroethenylmethylsilane	68584-83-8	No information available.	No information available.	No information available.
Olivine, cobalt silicate blue	68187-40-6	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.
Zinc oxide	1314-13-2	1.1 mg/L (Rainbow trout)	No information available.	None.

SDS No: PHC-054 EU

Page 9 of 14



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021 Revision No.: 3

SDS No: PHC-054 EU Page 10 of 14

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
Silicic acid, sodium salt, hydrolysis products with chlorotrimethylsilane and dichloroethenylmethylsilane	68584-83-8	No information available.	No information available.	No information available.
Olivine, cobalt silicate blue	68187-40-6	> 1000 mg/L (Daphnia magna)	No information available.	None.
formaldehyde	50-00-0	5.8 mg/L (Daphnia magna)	No information available.	None.
Zinc oxide	1314-13-2	0.098 mg/L (Daphnia magna)	No information available.	10

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Silicic acid, sodium salt, hydrolysis products with chlorotrimethylsilane and dichloroethenylmethylsilane	68584-83-8	No information available.	No information available.	No information available.
Olivine, cobalt silicate blue	68187-40-6	89 mg/L/72hr (Green algae)	10 mg/L/72hr	None.
formaldehyde	50-00-0	14.7 mg/L/24hr (Green algae)	No information available.	None.
Zinc oxide	1314-13-2	0.044 mg/L/72hr (Green algae)	No information available.	10

12.2 Persistence and degradability

: No data is available on the product itself. Contains the following chemicals which are not readily biodegradable: Aluminium oxide; Zinc oxide.

12.3 Bioaccumulation potential

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

<u>Components</u>	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Olivine, cobalt silicate blue (CAS 68187-40-6)	1.53 (estimated)	No information available.
formaldehyde (CAS 50-00-0)	0.35	3
Zinc oxide (CAS 1314-13-2)	1.53 (estimated)	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

: None known or reported by the manufacturer.

12.7 Other Adverse Environmental effects



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

- : 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	 Empty containers may contain hazardous residues. Empty containers should be taken for local recycling or waste disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. 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	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc oxide)	9	III	
ADR/RID Additional information	exceeding 30 k	d as Limited Quantity when transported in containers no la g gross mass. ntally hazardous substance mark must appear on packag	0		0
ICAO/IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Zinc oxide)	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. (Zinc oxide)	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.				

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.

SDS No: PHC-054 EU

Page 11 of 14



SDS No: PHC-054 EU

Page 12 of 14

CHO-THERM® 1642, Part B

SDS Revision Date (dd/mm/yyyy): 27/07/2021 **Revision No.: 3**

SAFETY DATA SHEET

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

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.			
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: 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: Olivine, cobalt silicate blue (CAS # 68187-40-6) Zinc oxide (CAS # 1314-13-2)			
Directive 94/33/EC on the protection of young people at work: None of the components are specifically listed. 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) - 2 (self classified)			

15.2 Chemical safety assessment

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



> SDS No: PHC-054 EU Page 13 of 14

CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

SECTION 16. OTHER INF	ORMATION
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% ECHA: European Chemicals Agency EEC: European Economic Community EN: European Standard EU: European Union HSDB: Hazardous Substances Data Bank IATA: International Air Transport Association IBC: Intermediate Bulk Container 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 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, 2018 (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/yy	
Reviewed Date SDS (dd/mm	: 27/11/2015 / уууу)
Revision No. Revision Information Regulation and Procedure	 27/07/2021 3 Minor formatting change.



CHO-THERM® 1642, Part B SDS Revision Date (dd/mm/yyyy): 27/07/2021

Revision No.: 3

SAFETY DATA SHEET

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

Aquatic toxicity ;Expert judgement
H-phrases (full-text)
H301 - Toxic if swallowed.
H302 + H332 - Harmful if swallowed or if inhaled.
H311 - Toxic 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 exposure="" if="" is<="" it="" of="" route="" td=""></state>
conclusively proven that no other routes of exposure cause the hazard>.
H350 - May cause cancer <state conclusively="" exposure="" if="" is="" it="" of="" proven="" route="" td="" that<=""></state>
no other routes of exposure cause the hazard>.
H361f - Suspected of damaging fertility.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
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.	251 K(91 Chomerics
Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com	icc Compliance Center

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

SDS No: PHC-054 EU

Page 14 of 14