SAFETY DATA SHEET

According to Regulation (EC) Nº 1907/2006 (REACH); 453/2010/EC

1. Substance/preparation and company name

Trade Name Thermosol -28ºC

Typical Applications Coolant – Antifreeze, Heat Transfer Fluid.

Company
Sucesores de Carmelo Pérez Martínez
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Emergency phone no. +34 91 562 04 20

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2. Hazard identification

2.1. Classification of the substance or mixture
No particular hazards known.

Classification according to Regulation (EC) No. 1272/2008 [CLP]:
The product is not subject to classification.

2.2. Label elements
Label according to Regulation (CE)N° 1272/2008 [CLP]:
The product is not subject to labeling.

2.3 Other hazards
Unknown.

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3. Composition/Information on ingredients

Triethylene Glycol with corrosion inhibitors.

Chemical name	CAS-No	CEE number	%
2,2'-[Ethane-1,2-diylbis(oxy)]di(ethan-1-ol) Hydroxyethoxy)ethoxy]ethanol	112-27-6	203-953-2	40-60

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4. First aid measures

General advice	Remove contaminated clothing.
On contact with eyes	Wash affected eyes for at least 15 minutes under running water with eyelids held open.
On skin contact	Wash thoroughly with soap and water.
If inhaled	If difficulties occur after vapour/aerosol has been inhaled remove to fresh air and seek medical attention.
On Ingestion	Rinse mouth and then drink water (two glasses at the most). Consult doctor if feeling unwell.
Note to physician	Symptomatic treatment (decontamination, vital functions), no known specific antidote.

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5. Fire fighting measures

Suitable extinguishing media:	Water spray, alcohol resistant foam, dry extinguishers, carbon dioxide (CO_2)
Specific hazards	Evolution of fumes/fog. The substances/group of substances mentioned can be released in case of fire. Vapours heavier than air.
Special protective equipment	In case of fire, wear a self contained breathing apparatus.
Further Information	The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed according to official regulations.

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6. Accidental release measures

Personal precautions:	Use personal protective clothing. Do not inhale vapors/aerosol.
Environmental precautions:	Do not discharge into drains, surface waters, ground water.
Methods for cleaning up/taking up:	Large amount: Pump off products. Residues/spills: Bind the liquid by using a suitable absorbent material and dispose it according to the regulations.

7. Handling and storage

Handling	Ensure thorough ventilation of stores and working areas.
Protection against fire and explosion.	Take precautionary measures against static discharges. If exposed to fire, keep containers cool by spraying with water.
Storage	Product is hygroscopic. Containers should be stored tightly sealed in dry place. Since zinc is not compatible with glycol, storage in galvanized containers is not recommended.

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8. Exposure controls and personal protection

General safety and hygiene measures: Wash hands and forearms after handling. Do not smoke, eat or drink during manipulations.

Personal protective equipment:

Respiratory protection: Only in case of release of fumes/fog. Well ventilated areas are recommended for manipulation.
Required when vapors/aerosols are generated. Filter A-(P2)

Hands: Chemical resistant protective gloves are recommended.

Eyes: Safety glasses with side-shields.

DNEL/DMEL values:

Data for CAS 112-27-6

Exposition way	Group of persons	Exposition time and /-effect	Value
Skin	Workers	Long / Systematic effects	40 mg/Kg.day
Inhalation	Workers	Long / Local effects	50 mg/m^3
Skin	Consumers	Long / Systematic effects	20 mg/Kg day
Inhalation	Consumers	Long / Local effects	25 mg/m^3

PNEC Values

Data for CAS 112-27-6

Fresh water:	10 mg/l
Sea water:	1 mg/l
Water (intermittent Releases):	10 mg/l
Fresh water -Sediment:	46 mg/Kg dry
Sea-Sediment	--,-- mg/kg dry

Soil:	3,32 mg/kg dry
Sewage treatment plant:	20000 mg/l

9. Physical and Chemical properties

Physical state	Liquid
Color	Red
Odor	Weak, characteristic
pH	8-9
Boiling point/range	ca. 102ºC
Solidification temperature	-22ºC to -28ºC
Vapor pressure at 20ºC	0.1 mbar to 20ºC
Flash point	>100ºC
Lower explosion limit	2,6% V/V
Upper explosion limit	12,6% V/V
Ignition temperature	> 200ºC
Density	1.07-1.09 g/cm^3 (20ºC)
Solubility in water	Unlimited.
Solubility in other solvents	Soluble in polar solvents.

10. Stability and reactivity

Hazardous reactions	No hazardous reactions if stored and handle as prescribed.
Substances to avoid	Powerful oxidizing agents and strong acids.
Hazardous decomposition products	No hazardous decomposition products if stored and handle as prescribed.

11. Toxicological data

Acute Toxicity:

DL50 (Ingestion, Rat): > 5.000mg/kg (IUCLID)
Information based on main substance.

Specific symptoms with animal studies:

Chronic toxicity:

12. Ecological data

Data for CAS 112-27-6

Ecological Toxicity

Acute Toxicity fishes: Lepomis macrochirus: LC50: >10 mg/l/96h (IUCLID)

Invertebrates
Algae
Microorganisms
Sedimentary Organisms
The inhibition of the active sludge is not expected, when the substance is given in small quantities.

Comments for aquatic toxicity
The product has not been studied. The results are based on the individual properties of the substances.

Persistence and degradability

Biodegradation 95%/14 days (OCDE 302 B): biologically easy degradable.
Information based on main substance.

Additional Information Do not release into natural waters.

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13. Disposal considerations

Contaminated packaging Uncontaminated canisters can be re-used.
Cannisters that cannot be cleaned should be disposed of in the same manner as the contents.

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14. Transport information

Not classified as hazardous under transport regulations.
(ADR / RID / ADNR / IMDG/GGVSee ICIAO/IATA)

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15. Regulatory information

Regulations of the European Union (labeling) / National legislation / Regulations:

Hazard symbol

H-phrases:
P-phrases:

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16. Further information

Abbreviations and acronyms:

PNEC: Predicted No Effect Concentration.
Intermittent Release: Intermittent but only recurring infrequently i.e. less than once per month and for no more than 24 hours.

This safety data sheet is intended to provide information and recommendations as to: 1. how to handle chemical substances and preparations in accordance with the essential requirements of safety precautions and physical, toxicological and ecological data. 2. How to handle, store, use and transport them safety.

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