



Material Safety Data Sheet (MSDS)

Product Name: TriStar PCE HB50

Version: 03/05/2023-03

1. Product and Company Identification

1.1 Product Name	TriStar PCE HB50 [A Hybrid High Range Water Reducer and Slump Controller PolyCarboxylate Ether (PCE) Polymer for Concrete]
1.2 Chemical Family	Polycarboxylic copolymer solution
1.3 Hazardous Classification	Irritating to eyes and skins
1.4 General Use	Superplasticizer for cement and concrete
1.5 Manufacturer's Name	TRISTAR TECHNICAL COMPANY LIMITED
1.6 Head Office	Factory #2460, Street #12, Second Industrial City, Dammam 34334-7030 K.S.A.
1.7 Phone :	+966 55 243 1548

2. Composition and Information on Ingredients

2.1 Component	Polycarboxylic copolymer / Water
2.2 CAS No.	1648593-57-0
2.3 Composition (%)	50.0 / 50.0

3. Hazard Information

3.1 Eye Contact	Primary eye irritating
3.2 Skin Contact	May cause skin drying when exposed for long time
3.3 Inhalation	N/A
3.4 Ingestion	N/A
3.5 Chronic Health Effect	N/A

5. Fire Fighting Measures

5.1 Flash Point	N/A
5.2 Natural Flammable point	N/A
5.3 Limits of Flammability	N/A
5.4 Extinguishing Media	Water Spray or fog, powder, carbon dioxide, foam.
5.5 Fire Fighting Introduction	Should wear a self-contained breathing apparatus and full protective clothing
5.6 Restricted Chemicals under Fire Law	N/A
5.7 Products of Combustion	N/A

6. Special Protection Information

6.1 Personal Protective Equipment	Rubber gloves, Goggles and other appropriate protective equipment are recommended for workers' safety.
6.2 Steps to be Taken in Case of Large Spill and Leak	Must keep the products from flowing into draining system of river by forming appropriate height of sand for soil. In case of small spill and leak, dilute with water and mop up, or adsorb with an inert dry material(sand or soil) and place in an appropriate waste disposal container.
6.3 Waste Disposal Methods	Finish cleaning by spreading water on the contaminated surface and dispose according to local / regional authority requirements.

7. Handling and Storage

7.1 Precautions for Safe Storage	Keep away from flammable, spark and hot materials. Keep container in a well-ventilated area. Avoid contact with skin and eyes. Keep away from strong oxidizers.
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7.2 Storage Precautions Keep container tightly closed in a cool and roofed area.
Synthetic resin including polypropylene is recommended for container material.

8. Exposure Control and Personal Protection

8.1 Engineering controls Provide exhaust ventilation (local or mechanical) or other engineering controls to keep the airborne concentration of vapors below their respective threshold limit value.

8.2 Respiratory Protection Not required in normal use.
If risk of inhalation of aerosols/mist/spray, wear half mask respirator.

8.3 Eye Protection Wear safety glasses.

8.4 Hand Protection Wear impervious rubber gloves.

8.5 Body Protection No skin contact is recommended.
Wear protective work clothes.

8.6 Precautions for Sanitation Wash contacting area clearly with soap when contacted.

8.7 Exposure Limits N/A

9. Physical and Chemical Properties

9.1 Appearance Yellow Liquid

9.2 Odor Mild

9.3 pH 3.8±2.0

9.4 Solubility Easily soluble in water

9.5 Boiling / Condensing Point 100°C approx.

9.6 Melting / Freezing Point < 0°C

9.7 Explosion Properties N/A

9.8 Oxidizing Properties N/A

9.9 Vapor Pressure N/A

9.10 Specific Gravity 1.11±0.04 g/ml

9.11 Viscosity Max 1000 cPs at 20°C

9.12 Log Kow N/A

9.13 Vapor Density N/A

9.14 Boiling N/A

9.15 Boiling point N/A

10. Stability and Reactivity

10.1 Chemical Stability Chemically stable under normal conditions.

10.2 Conditions of Instability Avoid contact with strong oxidizing agent and long exposure to hot temperatures.

10.3 Toxic Products by Decomposition N/A

10.4 Possibility of Toxic Chemical Production during Reaction N/A

11. Toxicological Information

11.1 Toxicity to Animals

Acute toxicity-oral, rats LD > 2,000 mg/kg

Acute toxicity-dermal, rabbits LD 2,000 mg/kg

Eye irritation, rabbits Mild irritation

Skin irritation, rabbit Almost no irritation

11.2 Chronic Effects N/A

11.3 Mutagenic and Teratogenic Effects N/A

11.4 Carcinogenic Effects N/A

11.5 Oral toxicity N/A

11.6 Inhalation toxicity N/A

11.7 Skin toxicity N/A

12. Ecological Information

12.1 Elimination Information	Test method : OECD 302B/ISO 9888/EEC 88302 C
Method of analysis	DOC(Reduction degree of elimination : >70%)
Evaluation	easy to eliminate
12.2 Behavior and Environmental Fate	Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

13. Disposal Consideration

13.1 Waste Information	Recycle if possible. Dispose waste in accordance with federal and local regulations.
13.2 Waste Disposal Method	Incinerate by small quantities. Ash from the incinerator must be treated by authorized handling companies. Waste water including the product must be cleaned by appropriate method
13.3 Precautions for Waste Disposal	including Bio-treatment method. Dispose empty container used for the product after being cleaned thoroughly.

14. Transport Information

14.1 Provisions for Maritime Transportation	N/A
14.2 Precautions for Maritime Transportation	Check container tightly sealed. Avoid shift, drop and damage of container.
14.3 Special Provisions by Foreign Transport Regulations	N/A
14.4 More information	IATA (60th Edition 2019) is not regulated as a hazardous material

15. Other Regulatory Information

15.1 Regulations by the Industrial Health and Safety Law	N/A
15.2 Regulations by the Chemical Management Law	N/A
15.3 Regulations by Foreign Countries' Laws	N/A

16. Other Information

16.1 Information Contact	Plant Office at TriStar Technical Company
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Notice to Reader

TRISTAR TECHNICAL COMPANY has no responsibility for injuries caused by use of this material if user did not follow stipulated items of this MSDS.
In addition, TRISTAR TECHNICAL COMPANY has no responsibility for injuries caused by abnormal use of this material.