

MATERIAL SAFETY DATA SHEET

Polycarboxylate Superplasticizer (PCE)

16-section safety data sheet for GAC-PCE (GHS format)

Product Code	GAC-PCE	CAS No.	Not assigned / proprietary polymer
Product Name	Polycarboxylate Superplasticizer (PCE)	Physical Form	White or yellowish powder
Supplier	Green Agrochem	Email	info@greenagrochem.com

SECTION 1: IDENTIFICATION

Product Identifier	Polycarboxylate Superplasticizer (PCE) (GAC-PCE)
Synonyms	PCE superplasticizer; polycarboxylate ether water reducer
Recommended Use	High-range water-reducing admixture for concrete and cement systems
Supplier	Green Agrochem www.greenagrochem.com info@greenagrochem.com
Source Document	Polycarboxylate Superplasticizer (PCE) Technical Data Sheet

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification	Not classified as hazardous under normal industrial handling based on available data.
Signal Word	Not applicable based on available information.
Potential Hazards	Fine powder may cause temporary mechanical irritation to eyes, skin, nose or throat.
Precautionary Statements	Avoid breathing dust. Wear protective gloves, safety glasses and a dust mask during prolonged handling.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	Modified polyether (SAE-IPEG)-based polycarboxylate copolymer with polyoxyethylene side chains and terminal carboxylic groups
Solid Content	98 ± 0.5%, per published specification
Trade Secret Statement	Exact polymer structure and molecular architecture are proprietary and controlled by sales contract and batch documentation.

SECTION 4: FIRST-AID MEASURES

Inhalation	Remove to fresh air. Seek medical attention if irritation persists.
Skin Contact	Wash with soap and water. Seek medical advice if irritation persists.
Eye Contact	Flush immediately with clean water for at least 10 minutes. Seek medical attention if irritation persists.
Ingestion	Rinse mouth with water. Seek medical attention if discomfort occurs.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water spray, foam, dry chemical powder or carbon dioxide.
Specific Hazards	May be combustible at high temperature.
Protective Equipment	Self-contained breathing apparatus recommended in enclosed or poorly ventilated areas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid dust generation and inhalation; wear suitable protective equipment.
Environmental Precautions	Prevent large quantities from entering drains, waterways or soil.
Clean-up Methods	Sweep or vacuum carefully, avoiding dust generation; place in a suitable container.

SECTION 7: HANDLING AND STORAGE

Handling	Use with adequate ventilation. Avoid generating dust. Do not mix with PNS-based superplasticizers in the same concrete batch.
Storage	Store in a cool, dry, well-ventilated area, in sealed original packaging, protected from moisture.
Incompatibilities	PNS (polynaphthalene sulfonate)-based superplasticizers — combined use causes rapid workability loss.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION	
Engineering Controls	Provide local exhaust or general ventilation where dust may be generated.
Respiratory Protection	Use an approved particulate respirator or dust mask if airborne dust is present.
Eye / Skin Protection	Safety glasses and gloves recommended during handling.
Hygiene Measures	Wash hands after handling and before eating, drinking or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	White or yellowish powder
Solid Content	98 ± 0.5%
pH (23°C)	7-10
Bulk Density	500-700 kg/m ³
Water Reducing Rate	25% min
Chloride Ion Content	0.1% max — free of calcium chloride, nitrates and nitrites

SECTION 10: STABILITY AND REACTIVITY	
Reactivity	No dangerous reaction known under normal handling and storage conditions.
Chemical Stability	Stable at room temperature in sealed original packaging.
Conditions to Avoid	Moisture ingress and excessive heat.
Incompatible Materials	PNS-based superplasticizers in the same concrete mixture.

SECTION 11: TOXICOLOGICAL INFORMATION	
Likely Routes of Exposure	Inhalation of dust, eye contact, skin contact, accidental ingestion.
Acute Effects	May cause mild mechanical irritation to eyes and respiratory tract from dust.
Chronic Effects	No unusual chronic effects known.
Carcinogenicity	Not listed as a carcinogen by IARC, NTP or OSHA.

SECTION 12: ECOLOGICAL INFORMATION	
Ecotoxicity	No product-specific aquatic toxicity data available; avoid release of concentrated material to waterways.
Persistence and Degradability	No product-specific data available for the polymer.
Mobility in Soil	Water-soluble; may be mobile in soil profile.

SECTION 13: DISPOSAL CONSIDERATIONS	
Waste Treatment	Dispose of unused material and contaminated packaging according to local, regional and national regulations.
Recommendation	Do not discharge concentrated material into drains or natural waterways.

SECTION 14: TRANSPORT INFORMATION	
UN Number	Not regulated as a dangerous good based on available information.
Special Precautions	Protect from moisture and package damage during transport.

SECTION 15: REGULATORY INFORMATION	
Regulatory Status	Prepared for industrial reference. Final classification, labeling and compliance must be verified against destination-country regulations and customer requirements.
Hazard Communication	Use the current 16-section SDS/MSDS format and provide worker training according to applicable regulations.

SECTION 16: OTHER INFORMATION	
Revision No.	1.0
Prepared By	Green Agrochem — Technical Documentation
Disclaimer	The information in this Safety Data Sheet is based on data believed to be accurate at the time of preparation. Green Agrochem makes no warranty, express or implied, regarding its accuracy or completeness, and assumes no liability for any damage resulting from its use. Users should conduct their own evaluation to determine suitability for a specific purpose, and must verify regulatory compliance before use, sale or shipment.