MATERIAL SAFETY DATA SHEET

Sodium Lignosulfonate — Retarder Powder Grade

16-section safety data sheet for GAC-NaLS-Retarder-P (GHS format)

Product Code	GAC-NaLS-Retarder-P	**CAS No.**	8061-51-6
Product Grade	Sodium Lignosulfonate — Retarder Powder Grade	**Physical Form**	Brown powder
Supplier	Green Agrochem	**Email**	info@greenagrochem.com

SECTION 1: IDENTIFICATION

Product Identifier	Sodium Lignosulfonate — Retarder Powder Grade (GAC-NaLS-Retarder-P)
Synonyms	Sodium lignosulphonate; lignosulfonic acid, sodium salt; sulfonated lignin, sodium salt
Recommended Use	Retarder in ready-mix concrete, delaying initial setting time
Supplier	Green Agrochem | www.greenagrochem.com | info@greenagrochem.com
Source Document	Sodium Lignosulfonate — Retarder Powder Grade Technical Data Sheet

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification	Not classified as hazardous under normal industrial handling based on available data. Sodium lignosulfonate is a naturally derived lignin sulfonation product with a long history of industrial and agricultural use.
Signal Word	Not applicable — product is not assigned a GHS signal word based on available data
Potential Hazards	Fine powder/mist may cause temporary mechanical irritation to eyes, skin, nose or throat.
Precautionary Statements	Avoid breathing dust/mist. Wear protective gloves, safety glasses and a dust mask during prolonged or repeated handling. Wash hands after use

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	Sodium Lignosulfonate (CAS 8061-51-6), a polymeric anionic surfactant derived from the sulfonation of natural lignin
Grade Basis	Sodium Lignosulfonate — Retarder Powder Grade (GAC-NaLS-Retarder-P): Appearance Brown powder; pH (10% solution) 9.0 – 11.0; Bulk Density 0.4 – 0.6 g/cm3; Moisture Content 5% max
Trade Secret Statement	Exact batch-level composition and process parameters are proprietary and are controlled by sales contract and the accompanying batch Certificate of Analysis (COA)

SECTION 4: FIRST-AID MEASURES

Inhalation	Move the affected person to fresh air. Seek medical attention if irritation or breathing discomfort persists
Skin Contact	Not expected to be hazardous under normal use. Remove contaminated clothing. Flush skin with water, then wash with soap and water
Eye Contact	Flush immediately with clean water for at least 10 minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. 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. Combustion may generate carbon oxides, sulfur oxides and irritating fumes
Protective Equipment	Firefighters should wear self-contained breathing apparatus and full protective gear in enclosed or poorly ventilated areas

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid dust/mist generation and inhalation; avoid skin and eye contact; wear suitable protective equipment
Environmental Precautions	Prevent large quantities from entering drains, waterways or soil
Clean-up Methods	Collect material into a suitable container; flush residual contamination with water in accordance with local sanitary/wastewater regulations

SECTION 7: HANDLING AND STORAGE	
Handling	Use with adequate ventilation. Avoid generating dust/mist. Avoid prolonged skin and eye contact. Clean up spills immediately
Storage	Store in a cool, dry, well-ventilated area, in sealed original packaging, away from children, food/feed products and heat sources. Protect liquid forms from freezing
Incompatibilities	Keep away from strong oxidizing agents, strong acids and strong bases, and excessive heat

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION	
Engineering Controls	Provide local exhaust or general ventilation where dust/mist may be generated
Respiratory Protection	Not normally required under adequate ventilation; use an approved particulate respirator or dust mask if airborne dust/mist is present
Eye / Skin Protection	Safety glasses and protective gloves recommended during handling
Hygiene Measures	Wash hands after handling and before eating, drinking or smoking

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Brown powder
pH (10% solution)	9.0 – 11.0
Bulk Density	0.4 – 0.6 g/cm3
Moisture Content	5% max
Flash Point	Not applicable / not expected to be readily flammable under normal handling

SECTION 10: STABILITY AND REACTIVITY	
Reactivity	No dangerous reaction known under normal handling and storage conditions
Chemical Stability	Stable at room temperature in closed containers under normal storage and handling conditions
Conditions to Avoid	Excessive heat, moisture ingress, and prolonged exposure to strong acids or bases
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases
Hazardous Decomposition Products	Carbon oxides, sulfur oxides and irritating fumes under fire conditions

SECTION 11: TOXICOLOGICAL INFORMATION	
Likely Routes of Exposure	Inhalation of dust/mist, eye contact, skin contact, accidental ingestion
Acute Effects	May cause mild irritation to eyes and skin; no specific acute toxicity effects documented in available data
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; lignosulfonates are generally regarded as having low aquatic toxicity
Persistence and Degradability	Derived from natural lignin; expected to be inherently biodegradable
Bioaccumulative Potential	Not expected to bioaccumulate given its high water solubility and polymeric/ionic nature
Mobility in Soil	Mobile in soil profile due to high water solubility

SECTION 13: DISPOSAL CONSIDERATIONS	
Waste Treatment	Dispose of unused material and contaminated packaging according to local, regional and national regulations
Packaging	Empty packaging should be handled to minimize residual dust/residue and disposed of or recycled according to local requirements
Recommendation	Do not discharge large quantities into drains or natural waterways

SECTION 14: TRANSPORT INFORMATION	
UN Number	Not regulated as a dangerous good based on available information
UN Proper Shipping Name	Not applicable
Transport Hazard Class	Not applicable
Packing Group	Not applicable
Special Precautions	Protect from moisture/temperature extremes and package damage during transport

SECTION 15: REGULATORY INFORMATION

Regulatory Status	Prepared for industrial reference. Final classification, labeling and transport compliance must be verified against destination-country regulations and customer requirements
Inventory / Compliance	Users and importers are responsible for confirming chemical inventory listing, registration and use restrictions in the destination market
Hazard Communication	Use the current 16-section SDS/MSDS format and provide worker training according to applicable regulations

SECTION 16: OTHER INFORMATION

Revision No.	2.0
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