GEARTH

SAFETY DATA SHEET
DustControl

GHS REV 10

1 Identification

Product identifier	DustControl
Other means of identification	Sodium lignosulfonate solution; liquid dust suppressant and surface stabiliser.
Recommended use	Dust suppression and surface stabilisation of unpaved roads, mine haul roads, gravel roads, stockpiles and materials handling areas. Applied diluted by spray-on or mix-in method.
Restrictions on use	Not for use in or near potable water supplies. Not for food, pharmaceutical or cosmetic applications. Not for use undiluted.
Supplier	GEARTH (Pty) Ltd, 96 Lazy River Road, Centurion 0157, Gauteng, South Africa
Telephone	012 004 8183 | info@gearth.co.za
Emergency telephone number	**066 214 2274 (24 hours)**

2 Hazards identification

2.1 Classification of the substance or mixture

GHS classification	Not classified as hazardous under the Regulations for Hazardous Chemical Agents, 2021 (aligned to UN GHS Rev 10).

2.2 Label elements

Hazard pictograms	None required.
Signal word	None required.
Hazard statements	None assigned.
Precautionary — prevention	Advisory (product not classified): P264 Wash hands thoroughly after handling. P280 Wear protective gloves and eye protection.
Precautionary — response	P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing. P302+P352 IF ON SKIN: wash with plenty of soap and water.
Precautionary — storage	P403+P233 Store in a well-ventilated place; keep container tightly closed. Store between 5 °C and 45 °C; protect from direct sunlight and from freezing.
Precautionary — disposal	P501 Dispose of contents and container in accordance with local regulations.

2.3 Other hazards

OTHER HAZARDS DISCLOSURE

Spilled or over-applied product produces slippery surfaces — a material consideration on haul roads carrying loaded vehicles. No PBT or vPvB assessment has been carried out. Application contributes sodium and sulfur to soil and runoff; consider this where salt-sensitive soils or water management controls apply.

3 Composition / information on ingredients

Ingredient	CAS no.	EC no.	Conc. % (w/w)	Classification
Sodium lignosulfonate	8061-51-6	No data available	40 – 50	Not classified
Water	7732-18-5	231-791-2	Balance to 100%	Not classified
Total			**100**	

No ingredient is withheld as a trade secret. The balance is water.

4 First-aid measures

4.1 Description of first-aid measures

Inhalation	Move the affected person to fresh air. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
Skin contact	Wash the affected area with soap and water. Remove contaminated clothing and wash before reuse.
Eye contact	Flush with plenty of water, holding the eyelids open, for at least 15 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. Give water to drink slowly. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects	No specific symptoms known. Prolonged skin contact may cause mild drying.

4.3 Indication of any immediate medical attention and special treatment needed

Medical attention	Treat symptomatically. Provide the treating physician with this safety data sheet.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Media appropriate to the surrounding fire: water spray, foam, dry chemical or carbon dioxide. The product itself is non-flammable (aqueous solution).
Unsuitable extinguishing media	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards / hazardous combustion products	On evaporation to dryness and subsequent combustion of the residue, carbon monoxide, carbon dioxide and sulphur oxides (SOx) may be released.

5.3 Advice for firefighters

Protective equipment for firefighters	Wear self-contained breathing apparatus and full protective clothing when fighting fires involving this product.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Wear protective gloves and eye protection. Beware of slippery surfaces — spilled product is markedly slippery.
Environmental precautions	Prevent entry into drains, sewers, watercourses and groundwater. Contain the spillage.
Methods and material for containment and cleaning up	Small spill: contain and absorb with sand, earth or other inert absorbent and collect into a labelled container for disposal. Large spill: contain the spill and recover free liquid where practical, absorb the residue with inert material and place in containers for disposal in accordance with local regulations. Wash the area with water, preventing runoff to watercourses.

7 Handling and storage

7.1 Precautions for safe handling

Safe handling	Avoid contact with eyes and prolonged contact with skin. Do not take internally. Keep containers closed when not in use. Do not reuse empty containers. Apply diluted in accordance with the current GEARTH DustControl technical data sheet.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store only in the original container, in a cool, dry, well-ventilated area out of direct sunlight, between 5 °C and 45 °C. Protect from freezing.
Packaging	25 L plastic drums; 1 000 L flow bins.
Shelf life	24 months from date of manufacture when stored as specified.
Incompatibilities	Strong oxidising agents.

8 Exposure controls / personal protection

8.1 Control parameters — occupational exposure limits

Substance	OEL type	Value	Source
Sodium lignosulfonate (CAS 8061-51-6)	OEL-TWA	No substance-specific occupational exposure limit assigned. General limits for particulates not otherwise specified under HCA Regs 2021 Annexure 2 apply.	HCA Regs 2021 Annexure 2

8.2 Appropriate engineering controls

Engineering controls	General ventilation is normally adequate. Where the product is sprayed in enclosed or poorly ventilated areas, provide local exhaust ventilation to control mist.

8.3 Individual protection measures

Eye / face protection	Safety glasses with side shields, or goggles where splashing is likely.
Skin / hand protection	Nitrile or other chemical-resistant gloves. Glove material: Nitrile or other chemical-resistant material; breakthrough time: Not determined — no data available
Respiratory protection	Not normally required. Where spray mist is generated in confined spaces, use an approved particulate respirator. Filter type: P2 / FFP2 or better
Thermal hazards	None required — the product is handled at ambient temperature.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Brown
Odour	Characteristic, slight
Melting point / freezing point	No data available — freeze / pour point not determined
Boiling point or initial boiling point and boiling range	> 100 °C
Flammability	Non-flammable
Lower and upper explosion limit / flammability limit	Not applicable — aqueous solution, non-flammable
Flash point	Not applicable — aqueous solution, non-flammable
Auto-ignition temperature	Not applicable — aqueous solution
Decomposition temperature	No data available
pH (concentration and temperature stated)	5 – 8 (undiluted)
Kinematic viscosity	No data available
Solubility	Completely soluble in water
Partition coefficient n-octanol/water (log Kow)	Not applicable — water-soluble polymeric organic salt
Vapour pressure	As water, approximately 2.3 kPa at 20 °C
Density and/or relative density	No data available
Relative vapour density	Not applicable
Particle characteristics	Not applicable — the product is a liquid

9.2 Other information

Explosive properties	Not classified
Oxidising properties	Not classified
Bulk density	Not applicable — the product is a liquid
Active solids	No data available

10 Stability and reactivity

Reactivity	No hazardous reactions known under normal conditions of use.
Chemical stability	Stable under the recommended storage conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid	Freezing. Prolonged exposure to direct sunlight. Temperatures above 45 °C.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Thermal decomposition of the dried residue may release carbon oxides and sulphur oxides (SOx).

11 Toxicological information

Likely routes of exposure	Skin and eye contact during application; inhalation of spray mist in confined spaces; ingestion is unlikely in normal use.
Symptoms related to exposure	No specific symptoms known. Prolonged skin contact may cause mild drying.
Delayed and chronic effects	No chronic effects have been attributed to occupational exposure to lignosulfonates over four decades of industrial manufacture and handling.

Numerical measures of toxicity

Endpoint	Species	Route	Value
LD50	Rat	Oral	> 5 000 mg/kg — read-across, sodium lignosulfonate
LD50	—	Dermal	No data available
LC50	—	Inhalation	No data available

Values read across from published literature on sodium lignosulfonate (CAS 8061-51-6). See Section 16 for sources and classification method.

Acute toxicity — dermal	No data available for the mixture
Acute toxicity — inhalation	No data available for the mixture
Skin corrosion / irritation	Not classified as an irritant — read-across, sodium lignosulfonate. Rabbit primary skin irritation index 0 – 1.5 against a non-irritating threshold of 5.
Serious eye damage / irritation	Not classified as an irritant — read-across, sodium lignosulfonate. Rabbit eye irritation scores of 0 at 24, 48 and 72 hours.
Respiratory sensitisation	No data available
Skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No evidence of carcinogenic properties. Not listed by IARC, NTP or OSHA.
Reproductive toxicity	No data available
STOT — single exposure	No data available
STOT — repeated exposure	Not classified. A 90-day subacute oral study in rats at dietary inclusion levels up to 5% found no adverse effect on growth, food utilisation, mortality, behaviour, haematology, urinalysis or gross pathology.
Aspiration hazard	No data available

12 Ecological information

Aquatic toxicity

Species	Endpoint	Value	Duration
Daphnia	EC50	> 1 000 mg/L (read-across)	24 / 48 h
Algae	EC50	> 600 mg/L (read-across)	72 h
Fish	LC50	2 125 – 7 300 mg/L depending on grade (read-across)	96 h

Not classified — all values are well above the 1 000 mg/L aquatic toxicity threshold. Values read across from published literature on sodium lignosulfonate (CAS 8061-51-6); see Section 16 for sources and classification method.

Persistence and degradability — method	OECD 302 series (inherent biodegradability); read-across from published literature on sodium lignosulfonate.
Persistence and degradability — result	Inherently biodegradable. Measured degradation of a lignosulfonate road binder on a chemical oxygen demand basis was 28% at 5 days and 43% at 33 days. Once adsorbed onto soil particles, lignosulfonates are progressively degraded by soil micro-organisms; in dust-suppression service the treated residue typically persists for six to twelve months, which is the basis of the product's sustained surface-binding performance. The product does not meet the OECD 301 pass criteria for classification as readily biodegradable.
Bioaccumulative potential	Low potential for bioaccumulation — read-across. Log Kow not applicable.
Mobility in soil	Water-soluble and mobile in soil. Leaching from treated surfaces occurs under rainfall.
Other adverse effects	Application contributes sodium and sulfur to surrounding soil and runoff. Consider cumulative loading where repeat applications are made near salt-sensitive soils or managed water bodies.

13 Disposal considerations

Waste residues	The product is not classified as a hazardous waste. Avoid release to drains, watercourses and groundwater.
Disposal methods	Dispose of in accordance with local, provincial and national regulations, via a registered waste contractor.
Contaminated packaging	Empty containers may retain residue. Rinse before disposal, or return to the supplier where a container return arrangement exists. Dispose of via a registered waste contractor.
Waste classification (NEM:WA 59 of 2008, GN R635)	Not classified as hazardous waste. A waste classification in terms of GN R635 has not been carried out.

14 Transport information

Mode	UN no.	Proper shipping name	Class	PG
Road (SANS 10228 / ADR)	Not regulated	Not regulated	Not classified	Not applicable
Rail (RID)	Not regulated	Not regulated	Not classified	Not applicable
Sea (IMDG)	Not regulated	Not regulated	Not classified	Not applicable
Air (IATA)	Not regulated	Not regulated	Not classified	Not applicable

Marine pollutant	Not a marine pollutant.
Transport in bulk (IMO instruments)	Not applicable
Special precautions for user	None. Secure containers against movement during transport.

15 Regulatory information

Safety, health and environmental regulations specific to the product	Occupational Health and Safety Act 85 of 1993; Regulations for Hazardous Chemical Agents, 2021; NEM:WA 59 of 2008; SANS 10234 (GHS classification and labelling); SANS 10228 and SANS 10229 (identification and packaging of dangerous goods for transport).
NRCS VC 8054 status	Not applicable — the product is not a disinfectant.
Ecolabel certification	None held.
Chemical safety assessment	No chemical safety assessment has been carried out for this mixture.

16 Other information

Date of preparation	August 2026
Latest revision	Rev 1.0, August 2026
Summary of changes	Rev 1.0, August 2026 — first issue.
Full text of hazard (H) statements	None — no hazard statements are assigned.
Full text of precautionary (P) statements	P264 Wash hands thoroughly after handling. P280 Wear protective gloves and eye protection. P302+P352 IF ON SKIN: wash with plenty of soap and water. P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing. P403+P233 Store in a well-ventilated place; keep container tightly closed. P501 Dispose of contents and container in accordance with local regulations.
Key to abbreviations	CAS: Chemical Abstracts Service. EC50: half maximal effective concentration. GHS: Globally Harmonised System. LC50: median lethal concentration. LD50: median lethal dose. OEL-TWA: occupational exposure limit, time-weighted average. PBT: persistent, bioaccumulative and toxic. SANS: South African National Standard. STOT: specific target organ toxicity. vPvB: very persistent, very bioaccumulative.
Classification method	Classification derived by calculation from the declared composition using the GHS mixture rules, supported by read-across from published toxicological and ecotoxicological literature on sodium lignosulfonate.
Training advice	Operators applying the product should be briefed on this safety data sheet, on the slippery-surface hazard on haul roads, and on the correct dilution and application method given in the technical data sheet.
Disclaimer	The information in this safety data sheet is correct to the best of GEARTH (Pty) Ltd's knowledge at the date of issue. It is provided as guidance for safe handling, use, storage, transport and disposal, and is not a specification or a warranty of quality. Determination of the suitability of the product for any particular purpose remains the responsibility of the user.

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GHS REV 10

SIGN-OFF

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