Material Safety Data Sheet

Section 1-Chemical Product and Company Identification

Trade Name of Product: Calcium lignosulfonate

Synonym: Calcium lignosulfonate

Chemical name: Lignosulfonate acid calcium salt

Chemical Formula: not available

Contact Information

Headquarter

Address:Lizeyayuan Apartment,South West Station Road,Fengtai

District,Beijing,China Zip code:100072

Branch Address. WestXinluo St. High-tech Dist, Jinan, Shandong, China.

Email:info@greenagrochem.com Http://www.greenagrochem.com

Section 2-Composition Information on Ingredients

Product Code	GAC-CaLS-1	GAC-CaLS-2	GAC-CaLS-3
Appearance	Light Yellow po wder	Yellow Brown po wder	Yellow Brown po wder
PH value	4-7	5-7	5-7
Dry maters	95%min	95%min	95%min
Water-insoluble	1.5%max	2%max	2.5%max
Sulphate	2%min	2%min	2%min
Total Calcium&magnesium(sulfate)	5%-8%	5%-8%	5%-6%
Lignosulphonate	55%min	50%min	50%min
Sugar	9%-10%	9%-12%	10-12%
Reducing Sugar	7%around	7%around	7%around
Ash	13%min	16%min	18%-21%
Bulk Density(kg/m3)	205	205	205
Moisture	7%Max	7%max	7%

CAS.**8061-52-7**

Section 3-Hazards Identification

Potential Acute Health Effects:no specific information available in our databank regarding the acute effect of this material for humans.

Route of Entry: Eyes, Inhalation, Skin and Ingestion

Section 4-First Aid Measures

Inhalation: Remove person to fresh air and support breathing as needed, Seek medical attention if

irritation persists.

Ingestion: Seek medical attention or call a poison control center immediately.

Skin: No poisonous to skin. Remove contaminated clothing and wash before reusing. Flush skin with water, and then wash with soap and water. Seek medical attention if skin becomes irritated.

Eye:In such case flush eye immediately for at leat 10 minutes .Get medical attention.

Section 5-Fire and Explosion Hazard Data

Flammability of the product:may be combustible at high temperature.

Flash point: Non-available

Flammable limits: Non-available Product of combustion: Non-available

Special remarks on fire hazards:Non-available Special remarks on explosion hazards:Non-available

Section 6- Accidental Release Measures

Small Spills: Clean up personnel should protect against mist inhalation and skin contact. Avoid generating mists, Spills when handling should be cleaned up immediately to prevent spreading.

Large Spills:use a shovel to put the material into a convenient wast disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evaluate through the sanitary system.

Section 7- Precautions for Safe Handling and Use

Precautions to be taken in handling and storing: Store in cool, dry areas away from children, feed and food products and sources of heat, Immediately clean up spills that occur during handling or storage.

Protect from freezing keep containers closed when not in use.

Section 8-Exposure Controls / Personal Protection

Occupational Exposure Limits:

No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). However, Workplace Exposure Standard(s) for particulates:Particulates not otherwise classified: 8hr WES-TWA 10 mg/m3 (inhalable dust) or 3 mg/m3 (respirable dust)As published by the New Zealand Occupational Safety and Health Service (OSH).

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure. These Exposure Standards are quides to be used in the control of

occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Orica Personal Protection Guide No. 1, 1998: E - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUSTMASK. Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If excessive dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9-Physical/Chenmical Characteristics

Physical state and appearance: Powder solid

Order:slight

Molecular weight: Not available

Color: yellow brown

Boiling point: Not available Melting point: Not available

Critical temperature: Not available Specific gravity: Not available Vapor pressure: Not available Vapor density: Not available

Solubility: easy soluble in cold water and hot water.

Section 10-Reactivity Data

Stability:Product stable at room temperature in closed containers under normal

storage and handling conditions

Chemical Incompatibilities: Strong bases and Acids

Condition to avoid: Avoid excessive heat.

Section 11-Toxicological Information

Eye Effects: Irritation

Skin Effects: May cause irritation

Acute Inhalation Effects:Not Determined Chronic Effects:No unusual chronic effects Carcinogenicity:Not listed as carcinogenic

Section 12-Ecoligical Information

Soil Absorption/Mobility: Mobile in soil profile

Section 13-Disposal Considerations

Disposal:Dispose of in an approved landfill or apply at recommended label rates.

Disposal Regulatory Requirement:Follow applicable Federal,State and local regulations

Section 14-Transport Information

Not regulated by the DOT

Section 15-Regulatory Information

Sudden Release of Pressure: No Immediate: YES

Fire:No Delayed:No

Reactive: No

Section 16-Other

Disclaimer:All information appearing herein is based upon data obtained from manufactuers and/or recognized technical

sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.