

MATERIAL SAFETY DATA SHEET

Valid for 24 hours only, once printed Accessed: Jun 9,2015 08:13

Meets 91/155/EEC and ISO 11014-1

COMPANY DETAILS

Name: LignoTech South Africa
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Fax. No.: +27(0) 39 973 6015
Emergency Telephone No.: +27(0) 39 973 6019

1 Product Identification

Product: **BORRESPERSE CA-SA**
Chemical Family: Lignosulphonates

2 Composition/Information on Ingredients

Product Description: Calcium Lignosulphonate
CAS No.: 8061 52 7 (Calcium Lignosulphonate)
EINECS No.: 23 25 064 (Calcium Lignosulphonate)
Hazardous Components: None
Appearance: Brown free flowing powder with very slight odour.

Chemical Entity	CAS No.	Proportion
Calcium Lignosulphonate	8061 52 7	VHIGH
Water	7732 18 5	LOW
Non hazardous ingredients	-	balance
Total		100%

Proportion (% weight per weight):
VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

3 Hazards Identification

This material is not classified as hazardous or Dangerous Goods for transport.

Main Hazard:	None
Flammability:	Non-flammable
Chemical Hazard:	None
Eye Effects – eyes:	Not an eye irritant.
Health Effects –skin:	Not a skin irritant.
Health Effects – ingestion:	Not expected to be the primary route of exposure.
Health Effects – inhalation:	May cause irritation to nasal tract.

4 First Aid Measures

Product in the eye:	Flush immediately with copious amounts of tap water. Seek medical attention if necessary.
Product on the skin:	Wash with water.
Product Ingested:	Drink water.
Inhalation:	Remove to fresh air.
If effects persist, seek medical attention.	
Notes to physician:	Treat symptomatically.

5 Fire Fighting Measures

Specific Hazards:	Non - combustible
Extinguishing Media:	Water, Foam or Carbon Dioxide.
Protective Clothing:	Standard fire-fighting protective clothing is required.
Hazardous Decomposition Products:	Sulphur dioxides, Carbon Monoxide. Not combustible, however following evaporation of aqueous component residual material may burn if ignited. On burning may emit fumes. Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6 Accidental Release Measures

Personal Precaution:	Rubber gloves, safety goggles and dust mask are recommended.
Environmental Precaution:	Do not discharge concentrated, undiluted product into lakes, streams, ponds, estuaries, oceans and other waters.
Spills:	Liquids/Solids/Powder: Avoid accidents by cleaning up immediately. Wear protective equipment to prevent skin and eye contamination. Contain – use a vacuum to collect powder spills to minimize dust formation. Avoid water contact with large powder spills, since powder will become sticky and slippery. Prevent run offs of liquids into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers for either re-use(if possible) or disposal.

7 Handling And Storage

Handling:	Avoid skin and eye contact and inhalation of powder dust. Dust mask, rubber gloves and safety goggles are recommended. Eye-wash fountains in the work place are strongly recommended.
Storage:	Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in section 10. Keep containers closed when not use – check regularly for leaks.
Incompatible Materials:	Incompatible with strong oxidizing agents.

8 Exposure Controls/Personal Protection

TLV:	5mg/m ³ (inert organic dust)
Personal Protection – respiratory:	Dust mask to be worn during clean up operation or when powder is exposed.
Personal Protection – hand:	Product is not a skin irritant. Rubber gloves are recommended.
Personal Protection – eye:	Safety glasses are required.
Personal Protection – skin:	Product is not a skin irritant.

Other Protection:	Eye wash fountain in the workplace is strongly recommended. Ensure adequate ventilation.
Engineering Measures:	Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

9 Physical and Chemical Properties

Physical State:	Free flowing powder.
Colour:	Brown
Odour:	Very slight odour
pH (10% solution):	7.0 ± 0.8
Dry Matter:	Min. 93%
Bulk Density:	> 500 kg/m ³
Solubility:	Soluble in water
Solubility in Organic Solvents:	Very Low
Partition coefficient: (N-octanol/water)	Method for determination is not available for this product.
Vapour Pressure:	Not applicable
Boiling Point (°C):	Not applicable
Melting Point (°C):	> 130 deg.C
Flash Point (°C):	Not applicable
Explosive Properties:	None
Autoignition Temperature:	> 150 deg.C

10 Stability and Reactivity

Hazardous Decomposition Products:	Not known
Materials to Avoid:	Not known
Conditions to Avoid:	In common with many organic chemicals, the product may in certain circumstances (>450 deg.C) form flammable dust clouds in air. The product is treated to minimize dust formation.
Stability:	Incompatible with strong oxidizing agents

11 Toxicological Information

Acute Toxicity:	LD ₅₀ : > 5 g/kg
Skin Irritant:	According to the OECD Guidelines No. 404, 1981, this product is not classified as a skin irritant.
Eye Irritant:	According to the OECD Guidelines No. 405, 1981, this product is not classified as a skin irritant.
No adverse health effects expected if product is handled in accordance with this Safety Data Sheet and product label. Symptoms or effects that may arise if the product is mishandled and over exposure are:	
Acute Effects:	
Inhalation:	Material may be an irritant to the mucous membranes and respiratory tract.
Skin Contact:	Contact with skin may result in irritation.
Eye Contact:	May be an eye irritant.
Ingestion:	Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
Long Term Effects:	No information available for product.

12 Ecological Information

Aquatic Toxicity – Fish:	According to OECD Method No. 203 this product is classified as not fish toxic.
Aquatic Toxicity – Algae:	No data available.
Biodegradability:	According to OECD Method No. 302B, this product is classified as inherently biodegradable.
Summary:	Not toxic or harmful to aquatic organisms.

13 Disposal Conditions

Disposal Method:	Dispose in accordance with local/national regulations governing the disposal of waste materials.
Disposal of Packaging:	Residues of packing may be incinerated unless local disposal regulations state otherwise.

14 Transport Regulations

Regulations:	No transport regulations for this product. Not classified as Dangerous Goods and is non – hazardous.
References:	Marpol, Annex II, Appendix III.
Haz. Chem. Code:	Not applicable as product is non – hazardous.

15 Regulatory Information

Information:	Not classified as dangerous for supply or conveyance. Non – hazardous.
Poison Schedule:	Not Applicable.

16 Other Information

Literary Reference

This Material Safety Data Sheet meets the requirements of 91/155/EEC and ISO 11014-1.

Date of revision: 03 August 2010

Revision Status: 2

Reason for Revision: Specification change

This MSDS summarises at the date of issue our best knowledge of the health hazard information of the product, and in particular how to safely handle and use the product in the workplace. This information is not a product specification and cannot be a base for contractual use. It is the responsibility of the user to review this MSDS prior to using this product and observe existing laws and directives.

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Borresperse CA-SA
Spec. No.: 014
Effective Date: 12.12.06
Revision Date: 01.01.15
Revision No. : 03

Valid for 24 hours only, once printed Accessed: Jun 9,2015 08:15

Borresperse CA-SA

Product Description

Borresperse CA-SA is a purified grade calcium lignosulphonate product with low insoluble content and with near neutral pH.

Typical application: As plasticizer or water reducing admixture for good grade concrete and mortar. When used as admixture, it reduces water demand, improves workability and produce low air entrained concrete, mortar.

CAS No. 8061-52-7 (Calcium lignosulphonate)

Specifications

		Test Method
Dry matter %	Min 93.0	LAB TEST 001
pH (10% solution)	7.0 ± 0.8	LAB TEST 008
Insolubles %	Max 0.5	LAB TEST 004

Active customers would be notified of changes where any.

Chemical Data

Parameter	Typical values*
pH	6.8
Calcium	6.3%
Total sulphur	4.0%
Total sugars	1.0%
Total alkaline content	0.5% m/m
Chloride content	0.1% m/m

Physical Data

Parameter	Typical values*
Colour	Brown
Moisture	6%
Bulk density	550 kg/m ³

*The above analyses are not formal specifications and values may change. All values calculated on solids where applicable.

Storage Stability:

As this is a powder product, shelf life can be several months to 2 years dependent upon the storage condition when kept in the original sealed packaging.

Compatibility:

Lignosulphonates are compatible with anionic and non-ionic dispersants, wetting agents and most organic and inorganic materials.

Packaging:

Powder is packed in 25 kg bags and 600 kg bulk bags.

Lead Time:

2 weeks lead time is typical for local.
6 to 8 weeks lead time for international.

Material Safety Data Sheets are available upon request.

Please contact your LignoTech Sales Representative for additional product information.

The information given here is based on our best knowledge and we believe it to be true and accurate. However, LignoTech South Africa does not warrant or guarantee in any manner whatsoever, including the warranty of merchant-ability or fitness for the end user the accuracy of the information and procedures listed herein and will not be responsible for any damage resulting from their use. This is not a controlled document unless viewed from the LignoTech SA database.

MATERIAL SAFETY DATA SHEET

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Meets 91/155/EEC and ISO 11014-1**COMPANY DETAILS**

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Emergency Telephone No.: +27(0) 39 973 6019

1 Product Identification

Product: **NORLIG SA**
Chemical Family: Lignosulphonates

2 Composition/Information on Ingredients

Product Description: Calcium/Sodium Lignosulphonate
CAS No.: 8061 52 7/8061 52 6
(Calcium/Sodium Lignosulphonate)
EINECS No.: 23 25 064 (Calcium Lignosulphonate)
Hazardous Components: None
Appearance: Brown free flowing powder with very slight odour.

Chemical Entity	CAS No.	Proportion
Calcium/Sodium Lignosulphonate	8061 52 7	VHIGH
Water	7732 18 5	LOW
Non hazardous ingredients	-	balance
Total		100%

Proportion (% weight per weight):
VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

3 Hazards Identification

This material is not classified as hazardous or Dangerous Goods for transport.

Main Hazard:	None
Flammability:	Non-flammable
Chemical Hazard:	None
Eye Effects – eyes:	Not an eye irritant.
Health Effects –skin:	Not a skin irritant.
Health Effects – ingestion:	Not expected to be the primary route of exposure.
Health Effects – inhalation:	May cause irritation to nasal tract.

4 First Aid Measures

Product in the eye:	Flush immediately with copious amounts of tap water. Seek medical attention if necessary.
Product on the skin:	Wash with water.
Product Ingested:	Drink water.
Inhalation:	Remove to fresh air.
If effects persist, seek medical attention.	
Notes to physician:	Treat symptomatically.

5 Fire Fighting Measures

Specific Hazards:	Non - combustible
Extinguishing Media:	Water, Foam or Carbon Dioxide.
Protective Clothing:	Standard fire-fighting protective clothing is required.
Hazardous Decomposition Products:	Sulphur dioxides, Carbon Monoxide. Not combustible, however following evaporation of aqueous component residual material may burn if ignited. On burning may emit fumes. Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6 Accidental Release Measures

Personal Precaution:	Rubber gloves, safety goggles and dust mask are recommended.
Environmental Precaution:	Do not discharge concentrated, undiluted product into lakes, streams, ponds, estuaries, oceans and other waters.
Spills:	Liquids/Solids/Powder: Avoid accidents by cleaning up immediately. Wear protective equipment to prevent skin and eye contamination. Contain – use a vacuum to collect powder spills to minimize dust formation. Avoid water contact with large powder spills, since powder will become sticky and slippery. Prevent run offs of liquids into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers for either re-use(if possible) or disposal.

7 Handling And Storage

Handling:	Avoid skin and eye contact and inhalation of powder dust. Dust mask, rubber gloves and safety goggles are recommended. Eye-wash fountains in the work place are strongly recommended.
Storage:	Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in section 10. Keep containers closed when not use – check regularly for leaks.
Incompatible Materials:	Incompatible with strong oxidizing agents.

8 Exposure Controls/Personal Protection

TLV:	5mg/m ³ (inert organic dust)
Personal Protection – respiratory:	Dust mask to be worn during clean up operation or when powder is exposed.
Personal Protection – hand:	Product is not a skin irritant. Rubber gloves are recommended.
Personal Protection – eye:	Safety glasses are required.
Personal Protection – skin:	Product is not a skin irritant.

Other Protection:	Eye wash fountain in the workplace is strongly recommended. Ensure adequate ventilation.
Engineering Measures:	Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

9 Physical and Chemical Properties

Physical State:	Free flowing powder.
Colour:	Brown
Odour:	Very slight odour
pH (10% solution):	5.5 ± 0.5
Dry Matter:	Min. 93%
Bulk Density:	> 500 kg/m ³
Solubility:	Soluble in water
Solubility in Organic Solvents:	Very Low
Partition coefficient: (N-octanol/water)	Method for determination is not available for this product.
Vapour Pressure:	Not applicable
Boiling Point (°C):	Not applicable
Melting Point (°C):	> 130 deg.C
Flash Point (°C):	Not applicable
Explosive Properties:	None
Autoignition Temperature:	> 150 deg.C

10 Stability and Reactivity

Hazardous Decomposition Products:	Not known
Materials to Avoid:	Not known
Conditions to Avoid:	In common with many organic chemicals, the product may in certain circumstances (>450 deg.C) form flammable dust clouds in air. The product is treated to minimize dust formation.
Stability:	Incompatible with strong oxidizing agents

11 Toxicological Information

Acute Toxicity:	LD ₅₀ : > 5 g/kg
Skin Irritant:	According to the OECD Guidelines No. 404, 1981, this product is not classified as a skin irritant.
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Acute Effects:

Inhalation:	Material may be an irritant to the mucous membranes and respiratory tract.
Skin Contact:	Contact with skin may result in irritation.
Eye Contact:	May be an eye irritant.
Ingestion:	Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
Long Term Effects:	No information available for product.

12 Ecological Information

Aquatic Toxicity – Fish:	According to OECD Method No. 203 this product is classified as not fish toxic.
Aquatic Toxicity – Algae:	No data available.
Biodegradability:	According to OECD Method No. 302B, this product is classified as inherently biodegradable.
Summary:	Not toxic or harmful to aquatic organisms.

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References:	Marpol, Annex II, Appendix III.
Haz. Chem. Code:	Not applicable as product is non – hazardous.

15 Regulatory Information

Information:	Not classified as dangerous for supply or conveyance. Non – hazardous.
Poison Schedule:	Not Applicable.

16 Other Information

Literary Reference

This Material Safety Data Sheet meets the requirements of 91/155/EEC and ISO 11014-1.

Date of revision: 10 November 2009

Revision Status: 1

Reason for Revision: Routine update

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Norlig SA
Spec. No.: 026
Effective Date: 05.05.04
Revision Date: 01.01.15
Revision No. : 02

Valid for 24 hours only, once printed Accessed: Jun 9,2015 08:15

Norlig SA

Product Description

Norlig SA is a purified grade calcium/sodium lignosulphonate product with very low insoluble content.

Typical applications: As plasticizer or water reducing admixture for good grade concrete and mortar. When used as admixture, it reduces water demand, improves workability and produce low air entrained concrete, mortar.

CAS No. 8061-52-7/8061-51-6 (Calcium/Sodium lignosulphonate)

Sales Specifications

Dry matter %	Min 93.0	Test Method
pH (10% solution)	5.5 ± 0.5	LAB TEST 001
Insolubles %	Max 0.3	LAB TEST 008
		LAB TEST 004

Active customers would be notified of changes where any.

Chemical Data

Parameter	Typical values*
pH	5.5
Calcium	3.3%
Sodium	3.1%
Total sugars	1.0%
Total sulphur	4.0%
Total alkaline content	5.0% m/m
Chloride content	0.1% m/m

Physical Data

Parameter	Typical values*
Colour	Brown
Moisture	6%
Bulk density	600 kg/m ³

*The above analyses are not formal specifications and values may change. All values calculated on solids where applicable.

Storage Stability:

As this is a powder product, shelf life can be several months to 2 years dependent upon the storage condition when kept in the original sealed packaging.

Compatibility:

Lignosulphonates are compatible with anionic and non-ionic dispersants, wetting agents and most organic and inorganic materials.

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