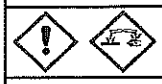
Safety Data Sheet

sappi

Waste Gypsum	Protective Clothing: 	In Case of Emergency Contact: Craig Daniel SHEQ Manager, Sappi Saiccor Tel: +27 39 973 8152 Cell: +27 83 666 6575



1. Product and Company Identification

Product Name	[Waste] Gypsum ($CaSO_4$)
Chemical Product Names	[Waste] calcium sulphate
Other Names	Gypsum
Material Uses	None; waste product
CAS#	10101-41-4 (for calcium sulphate dihydrate)
UN Number	1759
Hazchem Code	Not applicable
Details of the supplier:	Sappi Saiccor Mill, Umkomanzi Drift, Umkomaas, 4170

2. Composition and Information on Ingredients

Product name	Hazardous Ingredients	CAS No.	EC No.	% (W/W)
Waste Gypsum	Sulphur	7704-34-9	231-722-6	11.2
	Iron (II) sulphate	7720-78-7	231-753-5	1.14

3. Hazard Identification of Ingredients

Hazard Classification (SANS 10228)	Class 8
Hazard Rating (SANS 10234)	Cat. 4 Acute Toxicity; Cat. 2 Skin Corrosion/Irritation
Human Effects	Harmful if swallowed; Causes skin irritation
Environmental Effects	Not identified
Biological Hazard	Not identified
Hazard Statements	H302; H315
Precautionary Statements	P264; P270; P280; P301+P312; P330; P302+P352; P321; P332+P313; P362; P501.
Carcinogenicity	Not identified
Mutagenicity	Not identified
Neurotoxicity	Not identified
Teratogenicity	Not identified

4. First Aid Measures

Eye Contact	If material enters eyes, flush immediately with fresh water for at least 15 minutes. Seek immediate medical attention.
Skin Contact	Remove contaminated clothing and immediately wash underlying skin with fresh water. Seek immediate medical attention.
Inhalation	If material is inhaled, immediately remove source of inhalation and/or remove person to fresh air. Seek medical attention.
Ingestion	If material is swallowed and person is conscious, give plenty of water. Seek immediate medical attention. Never give anything by mouth to an unconscious person.
Notes to Physician	First aider to communicate route and duration of exposure to physician. Treatment should be symptomatic.

5. Fire Fighting Measures

Flammability	Gypsum is not considered flammable.
Extinguishing Media	Use extinguishing media suitable for surroundings. Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus and protective clothing.
Protective clothing	Full protective clothing and NIOSH-approved breathing apparatus are to be used by firefighters in the event of a fire.

6. Accidental Release Measures

Personal Precautions	Wear appropriate Personal Protective Equipment as outlined in **Section 8**. Avoid inhalation of residue dusts.
Environmental Precautions	Prevent uncontrolled release of gypsum. Do NOT allow to enter drains, sewers or other waterways.
Clean-up Methods	Spills: sweep up or shovel residue and place in containers for disposal. Store any discarded packaging in covered skips and follow handling and storage guidelines in **Section 7**.

7. Handling and Storage

Safe Handling	Wear appropriate Personal Protective Equipment as outlined in **Section 8**. Avoid inhalation of dust.
Safe Storage	Store in a cool, dry place undercover. Avoid contact with acids and oxidising agents as indicated in **Section 10**.

8. Exposure Control/ Personal Protection

Exposure Limits

Ingredients	Occupational Exposure Limits (Total Weighted Average)
Sulphur	5 ppm (as sulphur dioxide)
Iron (II) sulphate	1 mg/m^3 (8hr exposure)

Control Measures	Provide ventilation to reduce residue dust if working indoors. Ensure workers have eye-wash station nearby.
Personal Protective Equipment (PPE)	Wear protective gloves, safety goggles and coverall clothing when handling material. Respiratory protection may be needed in the event that the Occupational Exposure Limit is exceeded.
General Precautions	Avoid contact with skin and eyes; avoid breathing residue dust.
Environmental Exposure Control	Prevent uncontrolled release of material or dust. Do NOT allow material to enter drains, sewers or other waterways.

9. Physical and Chemical Properties

Appearance	Pale yellow	**Solubility**	0.2% at 25 °C
Size	Coarse sand-sized granules	**Flammability**	Not considered flammable
Odour	Not identified	**Auto Flammability**	Data unavailable
pH	8.92	**Exposure Properties**	Data unavailable
Density	2 320 g/cm^3	**Oxidizing Properties**	Data unavailable
Solubility solvent	Data unavailable	**Vapour Pressure**	0 mm Hg
Boiling Point	Data unavailable	**Incompatibility**	**See Section 10**
Flash Point	Data unavailable	**Viscosity**	Data unavailable
Melting Point	127 - 163 °C	**Solubility coefficient**	Data unavailable

10. Stability and Reactivity

Reactivity	Gypsum will react with acids and oxidising agents.
Chemical Stability	Gypsum is considered stable under normal conditions of use and storage.
Possibility of Hazardous Reactions	See **'Incompatible material'.**
Conditions to Avoid	Avoid the generation of dusts or fumes.
Incompatible material	Acids and strong oxidising agents.
Hazardous decomposition products	Sulphur oxides and calcium oxide may be released in a fire involving gypsum.

11. Toxicological Information

Ingredient Name	LD_{50}	Route	Species
Sulphur	175 mg/kg	Oral	Rat
Iron (II) sulphate	1 520 mg/kg	Oral	Mouse

Bio-Availability	No data available
Chronic Health Effects	Not identified
Carcinogenicity, Mutagenicity and Toxic to Reproduction (CMR) effects	Not identified as a human carcinogen, mutagen or toxic to reproduction

12. Ecological Information

Ingredient Name	LC_{50}	Period	Species
Sulphur	> 180 mg/l	96h	Oncorhynchus mykiss (rainbow trout)
Iron (II) sulphate	Median: 4.45 mg/l	96h	Salvelinus fontinalis (brook trout)

Eco Toxicity	No data available
Mobility	No data available
Persistence and Degradability	No data available
Bioaccumulation Potential	No data available

13. Disposal Considerations

Disposal Methods	If material cannot be re-used, it must be disposed of as hazardous waste in accordance with local and national environmental requirements. Ensure appropriate storage as indicated in **Section 7.** Do NOT wash into sewers or waterways. Must be transported and disposed of by appropriately licensed waste disposal company.

14. Transport Information

UN Number	Proper Shipping name	Classes	Packing group	Labels
1759	CORROSIVE SOLID, N.O.S.	Class 8	III	

15. Regulatory Information

Poisons Schedule Number	Not applicable
Handling, Storage and Disposal	• National Environmental Management Waste Act, Act No. 59 of 2008. • South African National Standards (SANS) 10234:2008, Globally Harmonized System of Classification and Labelling of Chemicals (GHS). • Department of Water Affairs and Forestry, Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste, Second Edition, 1998.
Transport	• National Road Traffic Regulations (2000) as promulgated under the National Road Traffic Act, No. 83 of 1996. • South African National Standards (SANS) 10228:2006, The Identification and Classification of Dangerous Goods for Transport.
Occupational	• Occupational Health and Safety Act (1993). Hazardous Chemical Substances Regulations, 1995. • Occupational Exposure Limits - Recommended Limits (South Africa, 1995).
SDS Content	This safety data sheet generally complies with the requirements of SANS 10234:2008 under the Globally Harmonized System.

16. Other Information

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Prepared by:	WSP Environmental (Pty) Ltd

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Date of Issue: 05 November 2014 End of SDS