

Safety Data Sheet

Waste handling and transport, RSA. No OELs / BLVs.

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Conforms to SANS 10234:2019, SANS 11014:2010
SDS compiled: 2021/10/25. Valid until: 2026/10/24
unless the applicable substance or mixture is altered
Version: 1

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WASTE MIXTURE: SOLID Boiler Ash

1. Identification

GHS product identifier

Trade name(s) : Boiler Ash

Supplier product code : No data available.

Other means of identification

Other synonym(s) : No data available.

Road & Rail PSN : NOT REGULATED

Relevant use(s) of the Mixture and restrictions on use

Identified use(s) : WASTE - intended for transport by road or rail, and disposal.

Uses advised against : WASTE - if a commercial product residue, not intended for original use. KEEP AWAY FROM clothing. DO NOT eat, drink or smoke when using this product. AVOID release to the environment. Collect spillage.

Generator details

Generator name : Gledhow Sugar Company

Generator address : 1 Gledhow Mill Rd

Contact title, name : Mr Dumisani Zungu

Phone number(s) : +27 (0) 32 437 4537

Alternative contact(s) : Dzungu@Gledhow.co.za

Emergency contacts

Contact title, name : Mr Dumisani Zungu

Emergency number(s) : +27 (0) 32 437 4537

After-hours number(s) : +27 (0) 32 437 4537

2. Hazards identification

Classification of the Mixture per SANS 10234:2019

GHS hazard category : GHS hazard statements

- 2 : SKIN IRRITATION
- 1 : SERIOUS EYE DAMAGE

Hazards not otherwise classified : Primary Health Hazards - In the event that the waste is utilised in a manner that results in significant dust generation, potential health hazards may arise from dust exposure via inhalation, eye contact and skin contact.

Eye contact: Dust may mechanically irritate the eyes, resulting in redness or watering.

Skin contact: Direct contact with dust particles can cause skin irritation.

Inhalation (acute): May cause irritation to the respiratory tract, chest pain.

Inhalation (chronic): Repeated inhalation of dust containing respirable crystalline silica is associated with silicosis, lung cancer and autoimmune disorders. Long term exposure to Aluminium oxide dust can lead to lung damage, while long term exposure to Iron Oxide dust can lead to pneumoconiosis (siderosis).

Ingestion: May cause gastrointestinal irritation.

GHS hazard label elements

Symbol(s) :



Exclamation mark
(GHS07)

Corrosive
(GHS05)

Signal word : **DANGER**

GHS hazard statements

Physical

No data available.

Health

H315 : Causes skin irritation

H318 : Causes serious eye damage

Environmental

No data available.

Precautionary measures label elements

General

Prevention

- P220 : KEEP AWAY FROM clothing.
- P261 : AVOID breathing dust, fume, gas, mist, vapours, spray.
- P262 : DO NOT get in eyes, on skin, or on clothing.
- P264 : Wash skin thoroughly after handling.
- P270 : DO NOT eat, drink or smoke when using this product.
- P273 : AVOID release to the environment.
- P280 : Wear protective gloves, protective clothing, eye protection, face protection.

Response

- P310 : IMMEDIATELY call a POISON CENTRE or doctor / physician.
- P314 : Get medical advice / attention if you feel unwell.
- P374 : Fight fire with normal precautions from a reasonable distance.
- P391 : Collect spillage.
- P301+P312 : IF SWALLOWED: Call a POISON CENTRE or doctor /physician if you feel unwell.
- P302+P352 : IF ON SKIN: Wash with plenty of water.
- P304+P312 : IF INHALED: Call a POISON CENTRE or doctor/physician if you feel unwell.
- P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P311 : If exposed or concerned: Call a POISON CENTRE or doctor/physician.
- P362+P364 : Take off contaminated clothing and wash it before reuse.

Storage

Disposal

- P501 : Dispose of contents/container to an approved facility in accordance with all applicable regulations and landfill requirements per this safety data sheet's Section 13.

Other

3. Composition or information on ingredients

Substance/mixture : Mixture

Ingredient(s)	CAS/IUPAC/Other Name(s)	[C//SA] %	Classification (Regulation)
Silicon dioxide (SiO ₂)*	7631-86-9	34.53% [NS]	-
Aluminium oxide (Al ₂ O ₃)	1344-28-1	15.01% [NS]	-
Iron oxide (Fe ₂ O ₃)	1309-37-1	2.67% [NS]	-
Calcium oxide (CaO)	1305-78-8	2.43% [NS]	H315 H318
Titanium oxide (TiO ₂)	13463-67-7	0.60% [NS]	-
Sulphur trioxide (SO ₃)	7446-11-9	0.49% [NS]	H315 H318
Phosphorous pentoxide (P ₂ O ₅)	1314-56-3	0.46% [NS]	H315 H318
Magnesium oxide (MgO)	1309-48-4	0.43% [NS]	-
Potassium oxide (K ₂ O)	12136-45-7	0.33% [NS]	H315 H318

Notes to above table: [C] Constituent component; [I] Impurity; [SA] Stabilising Additive; [NS] Not Specified; [O]

Additional Notes : Elemental oxides were used to represent chemical composition.
*Includes amorphous and crystalline forms

Other identifier(s) : No data available.

4. First-aid measures

Where the manufacturer/supplier/generator was unable to specify relevant measures, SANS 10234:2019 precautionary statements have been used.

Immediate actions : IMMEDIATELY call a POISON CENTRE or doctor / physician. If exposed or concerned: Call a POISON CENTRE or doctor/physician.

Actions to be avoided : DO NOT eat, drink or smoke when using this product. AVOID release to the environment.

First-aid measures

Inhalation : AVOID breathing dust, fume, gas, mist, vapours, spray. IF INHALED: Call a POISON CENTRE or doctor/physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

Skin Contact : KEEP AWAY FROM clothing. DO NOT get in eyes, on skin, or on clothing. Wash skin thoroughly after handling. Wear protective gloves, protective clothing, eye protection, face protection. IF ON SKIN: Wash with plenty of water.

Eye Contact : DO NOT get in eyes, on skin, or on clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion : DO NOT get in eyes, on skin, or on clothing. IF SWALLOWED: Call a POISON CENTRE or doctor /physician if you feel unwell.

Anticipated effects and symptoms summaries - see Section 11 for full explanations

Acute effects : No data available.

Delayed effects : No data available.

Symptoms / effects : No data available.

Protection of first-aiders and notes for attending physicians

First-aid protection : No data available.

Physician notes : Get medical advice / attention if you feel unwell.

5. Fire-fighting measures

Where the manufacturer/supplier/generator was unable to specify relevant measures, SANS 10234:2019 precautionary statements have been used.

Unsuitable extinguishing media	: No data available.
Extinguishing media and methods	: No data available.
Specific hazards arising from the Mixture	: No data available.
Protection of fire-fighters	: KEEP AWAY FROM clothing. AVOID breathing dust, fume, gas, mist, vapours, spray. Fight fire with normal precautions from a reasonable distance.

6. Accidental release measures

Where the manufacturer/supplier/generator was unable to specify relevant measures, SANS 10234:2019 precautionary statements have been used.

Personal precautions, protective equipment, and emergency procedures	: KEEP AWAY FROM clothing. Wear protective gloves, protective clothing, eye protection, face protection.
Environmental precautions	: AVOID release to the environment. Collect spillage.
Methods and materials for containment and for clean-up	: No data available.
Secondary disaster prevention measures	: No data available.
Additional information	: No data available.

7. Handling and storage

Safe handling	: DO NOT get in eyes, on skin, or on clothing. DO NOT eat, drink or smoke when using this product. AVOID release to the environment. Wear protective gloves, protective clothing, eye protection, face protection.
Safe storage	: No data available.
Technical measures	: No data available.
Incompatible materials	: No data available.
Packaging	: No data available.
Additional information	: Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment, and wash hands after use and before entering eating areas.

8. Exposure controls and personal protection

Concentration and exposure limits

Permissible concentration : No data available.

Exposure controls and Personal Protective Equipment (PPE)

Engineered controls : Activities that generate dust require the use of general ventilation and/or wet suppression methods to maintain exposure.

Respiratory PPE : Use respiratory protection approved under appropriate government standards.

Hand / arm PPE : Handle with gloves approved under appropriate government standards.

Eye / face PPE : Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin / body PPE : Wear protective clothing.

Hygiene measures : Handle in accordance with good hygiene and safety practice. Wash hands before and after handling.

Special conditions posing a hazard

Hazardous conditions : In the event of dust generation, potential health hazards may arise. Activities that generate dust (e.g. grinding, crushing, etc) should be avoided.

Additional information : No data available.

9. Physical and chemical properties (whole waste mixture)

Appearance : Dark grey, granular solid

Odour : Odourless

Odour threshold : No data available.

pH, concentration : 9.8

Melting point : No data available.

Freezing point : No data available.

Initial boiling point : No data available.

Boiling point : No data available.

Boiling range : No data available.

Flashpoint : <93 °C - No Flash

Flammability : No data available.
Auto-ignition point : No data available.
Decomposition point : No data available.
Lower explosion limit : No data available.
Upper explosion limit : No data available.
Vapour pressure : No data available.
Evaporation rate : No data available.
Vapour density : No data available.
Density : No data available.
Bulk density : No data available.
Relative density, SG : No data available.
Solubility : No data available.
Partition coeff. (n-oct) : No data available.
Partition coeff. (water) : No data available.
Dynamic viscosity : No data available.
Kinematic viscosity : No data available.
Radioactivity : No data available.

10. Stability and reactivity

Conditions to avoid : No data available.
Incompatible materials : No data available.
Hazardous decomposition : No data available.
Additional information : No data available.

11. Toxicological information

GHS Classification of Health Hazards

Acute toxicity : No data available.
Skin irritation/corrosion : Causes skin irritation
Eye damage/irritation : Causes serious eye damage
Respiratory or skin sensitization : No data available.

Germ cell mutagenicity : No data available.

Carcinogenicity : No data available.

Reproductive toxicity : No data available.

Specific target organ toxicity - single exp. : No data available.

Specific target organ toxicity - repeated exp. : No data available.

Aspiration hazard : No data available.

Hazard	Ingredient	Result	Species	Dose	Time
Skin irritation	CaO, SO ₃ , P ₂ O ₅ , K ₂ O	H315 (2)	-	-	-
Eye damage	CaO, SO ₃ , P ₂ O ₅ , K ₂ O	H318 (1)	-	-	-

Additional information : In the event of dust exposure, potential health hazards may arise via inhalation, eye contact and skin contact. Repeated inhalation of dust containing respirable crystalline silica is associated with silicosis, lung cancer and autoimmune disorders. Long term exposure to Aluminium oxide dust can lead to lung damage, while long term exposure to Iron Oxide dust can lead to pneumoconiosis (siderosis).

12. Ecological information

GHS Classification of Aquatic Environment Hazards

Acute aquatic toxicity : No data available.

Chronic aquatic toxicity : No data available.

Hazard to the ozone layer : No data available.

Hazard	Ingredient	Result	Species	Dose	Time

Persistence and degradability : No data available.

Bioaccumulation potential : No data available.

Mobility in soil : No data available.

PBT, vPvB summary : No data available.

Other adverse effects : No data available.

Additional information : Generic hazard data used above.

13. Disposal considerations

Current disposal prohibition/restrictions	: No current prohibitions identified.
Landfill Class (RSA) (subject to treatment)	: Type 1 Waste: Class A Landfill (H:H / H:h) per: GN R635 (7)(2)(b) - strictly subject to treatment due to GN R636 (5)(1) prohibited disposal: see above.
Future disposal prohibition/restrictions	: No future restrictions identified.
Safe, environmentally preferred disposal	: Dispose of contents/container to an approved facility in accordance with all applicable regulations and landfill requirements per this safety data sheet's Section 13.
Additional information	: Do not fly tip. Do not dispose into sewer, stormwater, or environment. Do not burn unless by means of compliant incineration practices.

14. Transport information

Proper Shipping Name (PSN) for: Road & Rail (SANS 10228) | Air (IATA) | Sea Freight (IMO/IMDG)

Road & Rail PSN	: NOT REGULATED
IATA PSN	: NOT REGULATED
IMO/IMDG PSN	: NOT REGULATED

Dangerous Goods Transportation: Road & Rail Requirements (SANS 10228:2012)

UN number	: -
Dangerous goods class (& Subsidiary)	: -
Packing group	: -
Special provisions	: -
Packaging codes	: -
Marine pollutant	: No data available.

Transport in bulk according to MARPOL 73/78 Annex II and the IBC Code

Regulation	: Not intended for sea freight.
Shipment approved	: Not intended for sea freight.
Pollution name	: Not intended for sea freight.
Pollution category	: Not intended for sea freight.
Ship type	: Not intended for sea freight.

Additional information

Additional information : No data available.

15. Regulatory information

Occupational H&S : Occupational Health and Safety Act (Act No. 85 of 1993)

Environment & Disposal : National Environmental Management: Waste Act (Act No. 59 of 2008)
: GN R634 Waste Classification and Management Regulations
: GN R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal
: GN R636 National Norms and Standards for Disposal of Waste to Landfill

Other (domestic) : National Road Traffic Act, 1996 (Act No. 93 of 1996)

Other (international) : No data available.

Classification & Hazard communication : SANS 10228:2012 The identification and classification of dangerous goods for transport by road and rail modes
: SANS 10234:2008 List of classification and labelling of chemicals in accordance with the Globally Harmonized System (GHS)
: SANS 10234:2019 Globally Harmonized System of classification and labelling of chemicals (GHS)

16. Other information

Compilation & version : 2021/10/25, Version: 1, Revision: -

Revision(s) : Not applicable

Summary of Mixture Hazard Classification and Categories

2 : SKIN IRRITATION
1 : SERIOUS EYE DAMAGE

Summary of Mixture Hazard Statements

H315 : Causes skin irritation
H318 : Causes serious eye damage

Signal word : **DANGER**

Other : No data available.

Disclaimer & Use

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