



RISK MANAGEMENT PLAN IN TERMS OF REGULATION 10 OF THE WASTE EXCLUSION REGULATIONS

	(For official use only)
File Reference Number:	12/9/11
NEAS Reference Number:	
Date Received:	

Risk Assessment for an application for exclusion of waste stream or portion of waste stream in terms of the National Environmental Management: Waste Act, 2008(Act No.59 of 2008), as amended.

Kindly note that:

1. This form is current as of 01 April 2021. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
3. Incomplete forms (including information as required in the application form may be returned to the applicant for revision and the inclusion of additional information.
4. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

BACKGROUND INFORMATION	
APPLICANT	Gledhow Sugar Company (Pty) Ltd
CONTACT PERSON	Gledhow Sugar Company SHERQ Manager
NAME	Clement Sithole
ADDRESS	1 Gledhow Mill Road, KwaDukuza, 4450 / PO Box 55, KwaDukuza, South Africa, 4450
E-MAIL ADDRESS	CSithole@Gledhow.co.za
TELEPHONE	032 437 4502
CELL PHONE	082 904 1645

WASTE FACILITY OR FACILITIES						
SOURCE (S) OF WASTE	Sugar Cane					
WASTE TO BE BENEFICIATED	Filter Cake					
GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES. <i>(please note that the co-ordinates are of the filter cake area).</i>	LATITUDE			LONGITUDE		
	29°	21'	49.94"S	31°	17'	22.51"E
	29°	21'	49.99"S	31°	17'	22.71"E
	29°	21'	50.46"S	31°	17'	22.47"E
29°	21'	50.39"S	31°	17'	22.27"E	
BENEFICIAL USE/S	Soil enhancer / fertilizer on sugar cane farms.					

WASTE GENERATING PROCESS		
MSDS ATTACHED IF HAZARDOUS	YES Please refer to Annexure 1	NO
WASTE GENERATING FACILITY	HAZARDOUS	GENERAL

RISK MANAGEMENT PLAN

Activity	Risk Description	Action(s) to minimise/manage the risk	Responsibility (Who is responsible to carry out the action(s))
<p>Context:</p> <ul style="list-style-type: none"> • Illovo Gledhow Sugar Company (GSC) has on their SHEQ system: <ul style="list-style-type: none"> - The Illovo Code of Conduct and Business Ethics and an overarching ILLOVO SHERQ policy. - Illovo has developed its own Integrated Risk Management System (IIRMS) to ensure that the standards to which the business conforms are unified under a single platform, guiding and measuring compliance. - IIRMS guidelines have been developed from best practices in the Illovo Group, and from best practice in their 		<ul style="list-style-type: none"> • It is the responsibility of Gledhow Sugar Company staff and those involved in the supply chain that will be handling, transporting, storing, or working with the filter cake waste stream, to be made aware of the safety data sheet its contents, how to read it and where to obtain it. • Each party: generator, driver/owner, and recipient of the filter cake/mixture, are to have the latest, legal copy of the safety data sheet. • Training must be held for the contents and understanding of the contents for all relevant stakeholders. • Gledhow Sugar Compant must incorporate the safety data sheet into the waste management system and emergency management systems, and contents into the work instructions, together with training and include these into the induction program. 	<p>Gledhow Sugar Company staff and all stakeholders working with the waste.</p>

<p>industry where necessary.</p> <ul style="list-style-type: none"> - IIRMS assists in the management of environmental risks at Illovo and ensures that these standards are implemented by the whole group. • Waste management plan. • Safety Data Sheet is a document for management of the filter cake to minimise any risk. • The GHS classification and the SSV comparison of the filter cake give very good indications of the hazards encountered by all affected stakeholders when working with ash. It helps to identify areas which must be managed in order to minimise or eliminate risks. The intention is to maximize the intended beneficial use of the waste, while minimising any 			
---	--	--	--

<p>unacceptable impacts to people, environment and economic harm.</p>			
<p>Filter cake removal to sugar cane farmers to be used as a soil enhancer / fertilizer.</p>	<ul style="list-style-type: none"> • Storage over time and running out of storage space, if demand is low. • Possible overflows into stormwater or sludge dams. 	<ul style="list-style-type: none"> • Ensure no pollution occurs from this waste source. • The particular recipients of this waste are recorded for the administration to keep records of this activity: <ul style="list-style-type: none"> ○ the quantity of waste; ○ the frequency of waste removal; and ○ to whom the waste is being distributed to. • The monitoring of the filter cake demand must match the amount of filter cake so that if any is stored on the platform in the mill from an emergency is also distributed to recipients. • This must not build up and cause an overflow into the sludge dam. • Should there be circumstances that would reduce the removal rate of the filter cake then the sludge dam level must be closely monitored to ensure this facility can cope with any overflow from the mill. • The tractor trailer must be maintained to prevent any break-downs and down-time. • The farmer's demand for the product would be co-ordinated with the season that the fertilization of the fields is happening and hence be coordinated with the supply, to prevent build-up of the material. 	<ul style="list-style-type: none"> • Manager in charge of the storage area for the filter cake. • Manager responsible for the sludge dam, • SHERQ manager. • Manager responsible for the distribution of the waste. • Production manager to know the quantity of waste generated. • Farmers who collect the waste for appropriate distribution either directly or through a driver. • Security Manager to ensure that the

			vehicles used are roadworthy and sound for the purpose that was engaged for.
Access to filter cake storage area.	<p>Security and safety</p> <ul style="list-style-type: none"> • Unauthorised entry into the facility. • Unauthorised removal of filter cake. 	<p>Gledhow Sugar Company gate security</p> <ul style="list-style-type: none"> • Retain security and access control at the gates. • Access to the key for entrance is carefully monitored. • Ensure vehicles are compliant to the road traffic Act and sound too. • Checking for correct PPE. • Site induction covers the safety and health risks and requirements for entering the site. Induction to be renewed every year. • The SDS is to be given to each farmer and worker. • Works instructions to include the vehicle checks. • Security to check no overfilled tractors when leaving. 	<p>Gledhow Sugar Company gate security</p>
Process of transferring the filter cake from the storage bins to the receiving vehicles.	<p>Dust: Windblown from the process of filter cake (if dried) transfer with front end loader. Sparks could trigger a fire.</p> <p>Spillage: onto area outside of bunded area.</p>	<ul style="list-style-type: none"> • Keep the filter cake moist to minimise dust formation and hence from being wind blown. • Ensure that only the responsible personnel needed for the activity are in the area for the duration of the transfer. • Ensure correct PPE is used in the area as per SDS, which includes appropriate clothing, footwear and respiratory protection is worn that is appropriate for the dust that may be generated. 	<p>Gledhow Sugar Company Manager responsible for waste and operations.</p>

	<p>Onto personnel not authorised to be at the location.</p>	<ul style="list-style-type: none"> • Eye wash and safety shower station to be clearly demarcated and close by. • Careful management of the transfer of filter cake to vehicles. • Procedure very clear for limit of filter cake load to fill vehicle trailer or bin; no overfilling, to minimise on-site and off-site spillage. • Clean-up of storage area with each batch of filter cake. • Ensure the area is cleaned at the end of the working day to minimise the chance of any oil grease or other materials to contaminate the filter cake. • Clean up any litter and other materials that can contribute to the contamination of the filter cake. • Ensure fire equipment available should there be a problem. 	
<p>Transporting of filter cake from the contractor vehicle to the farm.</p>	<p>Health, Safety and Environment.</p> <ul style="list-style-type: none"> • Overfilling receiving vehicle trailer with filter cake. • Road accidents. • Spillage onto roads, causing a nuisance as well as a safety hazard for vehicles by slipping. • Filter cake has a very strong odour. • Road accidents. 	<ul style="list-style-type: none"> • Ensure the driver is trained on the contents of the SDS and appropriate actions needed should an emergency arise. • Ensure vehicles are well maintained with service records available. • The condition of the vehicle is to be monitored by the onsite garage to include regular maintenance, driver reports for any concerns on the vehicle performance, • security gate personnel to check the vehicle condition when entering the gate. • Should there be any incident on the public road or on farm roads, an enquiry is to take place, to investigate whether any actions are needed. 	<ul style="list-style-type: none"> • Gledhow Sugar Company vehicle manager, • Driver supervisor, • Driver, • Security.

	<ul style="list-style-type: none"> • Non-compliance to the ROAD TRAFFIC ACT. (RTA) • Soil contamination from spillages. • Stormwater and natural water resource contamination by unmanaged washing of spillages from roads into the stormwater drains. • Affects the flora and local animals, domestic and wild as well as residents. • Natural water sources contamination. 	<ul style="list-style-type: none"> • Gledhow Sugar Company contact number (032 437 4400) clearly seen by outside persons affected by driver conduct or any incidents. • Procedure for off-loading of filter cake in the designated drop-off zones. • The protocol to ensure the off-loading vehicle driver knows the process for minimising the impact of the vehicle on the environment after completing the off-loading. • Driver to contact mill to clear up any spillages that occur on public roads. If mill is not responsible, then the driver will contact the relevant supervisor/manager to deal with the spill. • Have a hotline for public complaints for filter cake spillage and nuisance and register these on the SHE system. <ul style="list-style-type: none"> ○ Address these with the responsible owner/driver. • Regular training and tool-box talks for the drivers of vehicles. • Emergency procedures clearly outlined with issuing of the SDS for the implications of accidents and clean-up. • Clean-up protocols sufficient for clean-up to deal with the maximum loads for big spillages. • Including clean-ups, barriers, fires, injuries, etc. All outlined in the correct and updated SDS. • Checks for correct driver emergency equipment and training to deal with the emergency. 	
--	---	--	--

		<ul style="list-style-type: none"> • Vehicles to comply with all requirements for Road Traffic Act and <ul style="list-style-type: none"> ○ correct placarding with correct documentation held by driver for transporting hazardous materials. 	
Vehicle filter cake off-loading on designated area.	<p>Spillage:</p> <ul style="list-style-type: none"> • Outside of designated area. • Depending on the offloading procedure, the vehicle used to offload the filter cake may spill residual filter cake when travelling to other places to do work 	<ul style="list-style-type: none"> • Ensure that the filter cake is still moist to reduce the potential of windblown dust nuisance. • Any run-off is redirected away any natural water source. <ul style="list-style-type: none"> ○ This can be prevented by ensuring the riparian zone on the water course is intact. • The protocol for spreading onto the soils would be the same as any commercial fertilizer and lime additives to the soil management. • Ensure correct and appropriate PPE is used. Eye wash bottles to be available on the off-loading vehicle. • From a cradle to grave perspective the Mill would be responsible to ensure that no such fertiliser is offloaded or spilled in non-designated areas e.g. National road or entry point intersections or traverse areas. 	<ul style="list-style-type: none"> • Gledhow Sugar Company agriculture • User of the filter cake
Storage at end user facilities	<p>Health, Safety and Environment</p> <ul style="list-style-type: none"> • Run off and possible windblown dust if filter cake is allowed to dry. • Unauthorised removal of material. • Biological degradation of natural materials inside body of filter cake thus 	<ul style="list-style-type: none"> • Unauthorised removal of material is minimised by the farmer's internal security service by preventing trespassing in the property. • There should be no storage before dispersing onto the soils, to prevent any smouldering or fires. <ul style="list-style-type: none"> ○ It is strongly advised that the filtercake be dispersed onto the fields immediately and be ploughed in. ○ This mitigates or even eliminates the risk of fires. 	Farmer

	<p>causing temperatures to rise above the flash point and cause internal perpetual smouldering in the body of the stored filter cake.</p> <ul style="list-style-type: none"> • Smouldering causing cavities. within the body. 		
<p>Filter cake management during distribution onto the intended farm soil as the fertilizer/soil enhancer.</p>	<p>Dust:</p> <p>Health.</p> <ul style="list-style-type: none"> • There may be health impacts from working with the possibly dried filter cake during the spreading of fertilizer operations. • Possible irritation of eyes if product goes into the eyes. <p>Environment:</p> <p>Any run-off from the filter cake spreading operations will affect the receiving environment if not managed correctly, especially near to natural water sources.</p>	<ul style="list-style-type: none"> • All staff in the field are to be supplied with the correct PPE and <ul style="list-style-type: none"> ○ trained for application rates of the filter cake as well as ○ correct placement within the area of the field. ○ This is to keep the filtercake away from the possibility of run-off to cause pollution in the natural water sources. The same protocols would apply as to application of commercial fertilizer onto the fields. • The filter cake should be ploughed into the soils immediately to reduce the effect of the odour quickly. • Allow the filter cake to cool off at the storage area before use, and keep away from the public. • Unauthorised removal of material is minimised by the farmer's internal security service by preventing trespassing in the property. 	<ul style="list-style-type: none"> • Farmer • Property owner • Field staff with field supervisors
<p>Repeat application onto the same fields.</p>	<p>Environment:</p> <p>The soils may have salinity or other chemical build up if the</p>	<ul style="list-style-type: none"> • Ensure that the work is conducted with the inputs of a qualified agronomist that the soil viability is retained. 	<ul style="list-style-type: none"> • Farmer • Property owner • Field staff

	soils and application are not monitored.	<ul style="list-style-type: none"> ○ To prevent salinity build up and correct pH management, as well as other specific soil requirements to keep the crop healthy. 	
Secondary generation.	waste Environment: <ul style="list-style-type: none"> • Secondary waste generation would involve filter cake with a multitude of other contaminant items like litter, oils, grease, as well as other items if the storage sites are not managed. • Filter cake may also contaminate other streams if spillages occur. 	<ul style="list-style-type: none"> • The management of the filter cake emergency storage or removal platform includes the monitoring of any oil, grease or other waste stream spillages that may contaminate the filter cake and filter cake waste. This would render them unusable on the farm. • This includes the clean-up of litter. • Should there be a spill on this area: <ul style="list-style-type: none"> ○ immediately isolate the spill and ○ clean it up, together with any <ul style="list-style-type: none"> ▪ contaminated ash; ▪ filter cake; and ▪ other contaminated items. • These contaminated streams are to be isolated and managed for as per SHEQ protocol. • Disposal is to be safe and legal. • NOTE: the waste must be pre-treated before disposal. • The guidance of a qualified agronomist is required to manage the soils and the filtercake/ash waste streams to ensure good nutrient availability and soil conservation. 	<ul style="list-style-type: none"> • Gledhow sugar company waste manager and SHERQ manager
Emergency responders.		<ul style="list-style-type: none"> • The SDS MUST be made available to these personnel, to be able to understand the requirements for their own protection and the management of any spill. 	<ul style="list-style-type: none"> • Gledhow Sugar Company waste manager • SHERQ manager

		<ul style="list-style-type: none">• The drivers of the vehicles too, are to be trained in how to respond safely to any incident involving the load and who to contact in the case of any emergency.• The driver must know the protocol to manage the incident: and who to contact:<ul style="list-style-type: none">○ Owner;○ Emergency responders – fire, and medical; and○ First aid skill, as required at the level of the driver too.	<ul style="list-style-type: none">• Affected staff
--	--	--	---

I, Clement Sithole (the Applicant) hereby declare that I have read the completed Risk Management Plan form and hereby confirm that the information is, to the best of my knowledge, true and correct

Furthermore, I declare that I am fully aware of my responsibilities in terms of the Waste Exclusion Regulations, and that failure to comply with these Regulations may constitute an offence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).



Signature of the applicant¹/ Signature on behalf of the applicant:

Clement Sithole

Name of Applicant:

SHERQ Manager

Designation

23/06/23

Date:

ANNEXURE 1:
SAFETY DATA SHEET (SDS)

Safety Data Sheet

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

by: **TALBOT**
talbot.co.za | talbot@talbot.co.za 

Conforms to SANS 10234:2019, SANS 11014:2010
SDS compiled: 2021/10/27. Valid until: 2026/10/26
unless the applicable substance or mixture is altered
Version: 1

SDS Compiler v20.09.10.05.1

WASTE MIXTURE: SLUDGE Filter Cake

1. Identification

GHS product identifier

Trade name(s) : Filter Cake

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 : DEEMED SKIN IRRITATION
- 2A : DEEMED SERIOUS EYE IRRITATION

Hazards not otherwise classified : In the current form (wet filter cake), the waste is not expected to carry any significant inhalation hazards.
[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)]

GHS hazard label elements

Symbol(s) :



Exclamation mark
(GHS07)

Signal word : **WARNING**

GHS hazard statements

Physical

No data available.

Health

H315 : Causes skin irritation

H319 : Causes serious eye irritation

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

- P314 : Get medical advice / attention if you feel unwell.
- P321 : Specific treatment (see skin on this label).
- 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.
- P337+P313 : If eye irritation persists: Get medical advice/attention.
- 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)
Mixture	-	100%	H315 H319
Silicon dioxide (SiO ₂)*	7631-86-9	14.27% [NS]	-
Calcium carbonate (CaCO ₃)	471-34-1	~6.82% [NS]	-
Aluminium oxide (Al ₂ O ₃)	1344-28-1	3.22% [NS]	-
Iron oxide (Fe ₂ O ₃)	1309-37-1	2.33% [NS]	-
Magnesium oxide (MgO)	1309-48-4	0.65% [NS]	-
Titanium oxide (TiO ₂)	13463-67-7	0.18% [NS]	-
Manganese oxide (MnO)	1344-43-0	0.16% [NS]	-

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

Other possible ingredient(s) : Potassium salts, Phosphorous (phosphates) and Sulphur (sulphates/ sulphites) containing compounds, Calcium oxide/hydroxide, Residual sugars

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

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 : 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. If eye irritation persists: Get medical advice/attention.
- 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. Specific treatment (see skin on this label).

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 : No data available.

Respiratory PPE : Wear respiratory protection.

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 : KEEP AWAY FROM clothing.

Additional information : No data available.

9. Physical and chemical properties (whole waste mixture)

Appearance	: Wet, dark-brown sludge cake
Odour	: Sweet, sugary odour
Odour threshold	: No data available.
pH, concentration	: 4.6
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 irritation
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	Mixture	H315 (2)	-	-	-
Eye irritation	Mixture	H319 (2A)	-	-	-

Additional information : Generic hazard data used above.

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 : Type 0, Prohibited Waste per GN R636 (5)(1)(b) Waste with a pH value of <6 or >12. Analytical value of: 4.6 pH.
(1)(q)(ii) Waste with a moisture content >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment. Analytical value of: 71 %.

Landfill Class (RSA) (subject to treatment) : Type 3 Waste: Class C Landfill (GLB+) per: GN R635 (7)(2)(d) - strictly subject to treatment due to GN R636 (5)(1) prohibited disposal: see above.

Future disposal prohibition/restrictions : Future Prohibited Waste per GN R636 (5)(1)(r)(iv) >6% Total Organic Carbon (TOC). Hazardous waste with analytical value of: 69 %. (Prohibited from: Aug 2028)

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	: 2021/10/27, Version: 1, Revision: -
Revision(s)	: Not applicable

Summary of Mixture Hazard Classification and Categories

2 : DEEMED SKIN IRRITATION
2A : DEEMED SERIOUS EYE IRRITATION

Summary of Mixture Hazard Statements

H315 : Causes skin irritation
H319 : Causes serious eye irritation

Signal word : **WARNING**

Other : No data available.

Disclaimer & Use

This Safety Data Sheet (SDS) has been prepared based on information provided to the compiler and the series of physico-chemical tests conducted at the time, as well as regulations, methods and principles per the regulatory information noted in Section 15 herein. Should additional, supporting, or contrary information be identified to that which is contained herein, Talbot and the contact person noted in Section 1 must be informed immediately. The observations and recommendations made herein, and any other information or statements contained in this SDS must be applied with common sense. A precautionary, or minimum requirement, approach should be adopted in terms of all measures contained herein. This SDS is not a substitute for appropriate communication and training in terms of the hazards of the substance or mixture in question, nor the safe and legal handling, storage, transportation, and disposal. This SDS is not a toxicological study, standard operating procedure, risk assessment, license for handling, storage, transportation, or disposal of any substance or mixture, or a waste manifest. The developer of the waste pack compiler N.Hart, SDS author, and Talbot (Pty) Limited accept no liability whatsoever associated with the generation or use of this SDS or the information, observations, statements, or recommendations made herein. End of SDS.