

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

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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	Illovo Suga	Illovo Sugar (South Africa) (Pty) Ltd – Eston Sugar Mill				
Contact Person	Country S	HERQ Man	ager			
Name	Shaun Ra	msunder				
Address	PO Box 19	94, Durban,	South Afric	a, 4000		
E-Mail Address	SRamsun	der@illovo.	<u>co.za</u>			
Telephone	031 508 4	591				
Cell Phone	084 554 9	664				
WASTE FACILITIY OR FACILITIES						
	The sludge	e is collecte	ed as the se	tled solids	from a wast	e water
	treatment	process da	m. The was	te water is t	the influent	flow of all
SOURCE (S) OF WASTE	the waste liquids from the mill processes.					
WASTE TO BE BENEFICIATED	Sludge					
GPS CO-ORDINATES AT		LATITUDE		L	ONGITUDE	
CORNERS OF WASTE	29°	52'	40.03"S	30°	31'	31.67"E
GENERATING FACILITY OR	29°	52'	38.38"S	30°	31'	50.12"E
FACILITIES	29°	52'	39.05"S	30°	31'	54.39"E
	29°	52'	48.09"S	30°	31'	53.57"E
(please note that the co -	29°	52'	56.11"S	30°	31'	38.02"E
ordinates are of the	29°	52'	42.30"S	30°	31'	29.64"E
sedimentation dam)						
BENEFICIAL USE/S	Soil enhancer on sugar cane farms.					
WA	ASTE GENE	RATING P	ROCESS			
MSDS ATTACHED IF	YES 🗸 NO					
HAZARDOUS	Please refer to Annexue 1					
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)
Safety data sheet of the sludge	Storage over time and running out of dam storage space, if demand is low.	 It is the responsibility of Eston mill line manager to ensure all relevant staff that will be handling, transporting, storing, or working with the sludge 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 sludge, 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. Eston Mill 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. Operations manager shall monitor the build up of the sludge on the effluent canal and dam, and ensure theres sufficient storage space at all times. Dry cleaning shall be practised to ensure good housekeeping and prevent particulate surface runoff that builds up sludge on the effluent canal and storage dam. 	Line manager and all relevant staff
Sludge removal on demand	 Security: Unauthorised entry into the facility. Unauthorised removal of filter cake. 	 To ensure no pollution occurs from this waste source or is managed should there be an incident. For the distribution of the waste to the particular recipients for the administration to record this activity: the quantity of waste, the frequency of waste removal and to whom the waste is being distributed to. To know the quantity of waste generated. The monitoring of the sludge demand must match the amount of sludge that is stored on the platform in the mill. 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 sludge 	Manager in charge of the storage area for the sludge, the manager responsible for the sludge dam. Security Guard. The production manager

		 then the sludge dam level must be closely monitored to ensure this facility can cope with any overflow from the mill. Security at the entrance to allow only the authorized trucks/farmers to remove the sludge on site. Should there be a breach of security, that systems are in place to prevent future breaches. 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. 	
Access to sludge storage area	 Spillage: Onto area outside of protection area. Splash onto personnel not authorised to be at the location. 	 Retain security and access control at the gates. 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. 	Eston Mill gate security
Process of transferring sludge from the sludge dam area to the receiving vehicles.	 Spillage: Onto area outside of protection area. Splash onto personnel not authorised to be at the location. 	 The sludge has high moisture, thus the impact from dust is minimised. 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: appropriate clothing footwear and respiratory protection is worn that is appropriate to the dust that may be generated. Eye wash and safety shower station to be clearly demarcated and close by. Careful management of the transfer of sludge to vehicles. Procedure very clear for limit of vehicle load, to minimise on-site and off-site spillage. Clean-up of storage area with each batch of sludge. 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 mixture. 	Manager responsible for waste and operations.

Transporting of sludge by tractor and trailer to farm.	 Spillage: Overfilling receiving vehicle trailer with sludge Road accidents. Non –compliance to the Road Traffic Act (RTA) Soil contamination. Affects the flora and local animals, domestic and wild as well as residents. Natural water sources contamination. 	 Clean up any litter and other materials that can contribute to the contamination of the sludge. 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 on site 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. Illovo Eston mill hotline contact number (0800) clearly seen by outside persons affected by driver conduct or any incidents. Procedure for off-loading of sludge 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. Have a hotline for public complaints for sludge spillage and nuisance and register these on the SHE system. Address these with the responsible owner/driver. Train them again. 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. 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. Vehicles to comply with all requirements for Road Traffic Act. 	Eston mill vehicle manager, driver supervisor and driver, security.

Vehicle sludge off-loading	 Spillage: Outside of designated area. Depending on the offloading procedure, the vehicle used to offload may spill residual mixture which still remains on it when travelling to other places to do work. 	•	Ensure that the sludge is still moist to reduce the potential of windblown dust nuisance. Any run-off is redirected away any natural water source. This can be prevented by ensuring the riparian zone for 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. The sludge should be ploughed into the soils immediately and not stored on site.	Eston mill agriculture - MCP and user of the sludge.
Storage at end user facilities	 Run off and possible windblown dust if mixture is allowed to dry. Unauthorised removal of material 	•	As given above for off-loading protocols to prevent run-off contamination of natural water sources. Unauthorised removal of material is minimised by the farmer's internal security service by preventing trespassing in the property. The sludge should be ploughed into the soils immediately and not stored on site.	Farmer.
Sludge management during distribution onto the intended farm soil as the fertilizer/soil enhancer.	Dust: Health. There may be health impacts from working with the possibly dried sludge during the spreading of fertilizer operations. Environment: Any mixture run- off from the mixture spreading operations will affect the receiving environment if not managed	•	All staff in the field are to be supplied with the correct PPE and trained for application rates of the sludge as well as correct placement within the area of the field. This is to prevent the sludge 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 Out grower and MCP client designates a loading zone which the sludge is off-loaded routinely each day, the grower in turns distributes over their land at their own discretion. The sludge should be ploughed into the soils immediately.	Farmer - property owner and field staff with field supervisors.

Repeat application onto the same fields.	correctly, especially near to natural water sources. Environment: The soils may have salinity build up if the soils and application are not monitored	•	Ensure that the work is conducted with the inputs of a qualified agronomist so that the soil viability if retained. To prevent salinity build up and correct pH management, as well as other specific soil requirements to keep the crop healthy.	Farmer, property owner and field staff.
Secondary waste generation	Environment:. Secondary waste generation would involve sludge with other contaminant items like litter, oils, grease, as well as other items if the storage sites are not managed and wind blown waste enters the sludge storage/dam.	•	Monitoring of any oil, grease, other waste stream spillages that may contaminate the sludge waste. Clean-up of litter, oils and other wastes. Should there be a spill on this area: immediately isolate the spill and clean it up, together with any contaminated ash, filter cake and sludge. These contaminated streams are to be isolated and managed for as per SHEQ protocol. Disposal is to be safe and legal.	Eston mill waste manager and SHEQ manager.
Emergency responders		•	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. 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: Owner, emergency responders – fire, and medical. First aid skill, as required at the level of the driver too.	Eston mill waste manager and SHEQ manager affected staff.

I, <u>Summer</u> (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:

Name of Applicant:

CAUNTRY SHER

Designation

2023

Date:

¹ If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.

Annexure 1:

Safety Data Sheet

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: 2022/09/29. Valid until: 2027/09/28 unless the applicable substance or mixture is altered Version: 1

WASTE MIXTURE: SLUDGE ILLOVO SUGAR - ESTON MILL: SLUDGE

SDS Compiler v20.09.10.05.1

1. Identification

GHS product identifier

Trade name(s)	: ILLOVO SUGAR - ESTON MILL: SLUDGE
Supplier product code	: No data available.
Other means of identif	ication
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	: Illovo Sugar South Africa (Pty) Ltd - Eston Mill
Generator address	: District Rd R624,Eston, 3740
Contact title, name	: Nancy Sutar
Phone number(s)	: +27 (0) 83 504 3005
Alternative contact(s)	:nsutar@illovo.co.za
Emergency contacts	
Contact title, name	: Nancy Sutar
Emergency number(s)	: +27 (0) 83 504 3005
After-hours number(s)	: +27 (0) 83 504 3005

2. Hazards identification

Classification of the Mixture per SANS 10234:2019

GHS hazard category : GHS hazard statements Not deemed hazardous based on available information. Hazards not otherwise : Not specified due to classification; apply reasonable care. classified

GHS hazard label elements

Symbol(s) : NONE - Not deemed hazardous based on available information.

Signal word	: NONE - Not deemed hazardous based on available information.
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GHS hazard statements

Physical	Not specified due to classification; apply reasonable care.
Health	Not specified due to classification; apply reasonable care.
Environmental	Not specified due to classification; apply reasonable care.
Precautionary measure	es label elements

General

No data available.

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.
P270 : DO NOT eat, drink or smoke when using this product.
P273 : AVOID release to the environment.

Response

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.
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.

Slorage

No data available.

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

No data available.

3. Composition or information on ingredients

Substance/mixture : Mixture

-

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

Hazardous ingredients : No data available. above cut-off levels

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	: 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.
Skin Contact	KEEP AWAY FROM clothing. DO NOT get in eyes, on skin, or on clothing.
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 an	d symptoms summaries - see Section 11 for full explanations
Acute effects	: Not specified due to classification; apply reasonable care.
Delayed effects	: Not specified due to classification; apply reasonable care.
Symptoms / effects	: Not specified due to classification; apply reasonable care.
Protection of first-aide	ers and notes for attending physicians
First-aider protection	: Not specified due to classification; apply reasonable care.
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	: Not specified due to classification; apply reasonable care.
Extinguishing media and methods	Not specified due to classification; apply reasonable care.
Specific hazards arising from the Mixture	: Not specified due to classification; apply reasonable care.
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.
Environmental precautions	: AVOID release to the environment. Collect spillage.

Methods and materials : Not specified due to classification; apply reasonable care. for containment and for clean-up

Secondary disaster : Not specified due to classification; apply reasonable care. prevention measures

Additional information : Not specified due to classification; apply reasonable care.

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.				
Safe storage	: Not specified due to classification; apply reasonable care.				
Technical measures	: Not specified due to classification; apply reasonable care.				
Incompatible materials	: Not specified due to classification; apply reasonable care.				
Packaging	: Not specified due to classification; apply reasonable care.				
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	: Not specified due to classification; apply reasonable care.
concentration	

Exposure controls and Personal Protective Equipment (PPE)

Engineered controls	: Not specified due to classification; apply reasonable care.
Respiratory PPE	: Not specified due to classification; apply reasonable care.
Hand / arm PPE	: Not specified due to classification; apply reasonable care.
Eye / face PPE	: Not specified due to classification; apply reasonable care.
Skin / body PPE	: Not specified due to classification; apply reasonable care.
Hygiene measures	: Not specified due to classification; apply reasonable care.

Special conditions posing a hazard

Hazardous conditions : KEEP AWAY FROM clothing.

Additional information : Not specified due to classification; apply reasonable care.

9. Physical and chemical properties (whole waste mixture)

Appearance	: Black sludge
Odour	: Odourless
Odour threshold	No data available.
pH, concentration	:7.4
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	: Not specified due to classification; apply reasonable care.
Incompatible materials	: Not specified due to classification; apply reasonable care.
Hazardous decompostion	: Not specified due to classification; apply reasonable care.
Additional information	: Not specified due to classification; apply reasonable care.

11. Toxicological information

GHS Classification of Health Hazards

Acute toxicity	: No data available.
Skin irritation/corrosion	: No data available.
Eye damage/irritation	: No data available.
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

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 u	sed above.			

13. Disposal considerations

Current disposal prohibition/restrictions	: Type 0, Prohibited Waste per GN R636 (5)(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: 83 %.
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). Non-hazardous waste with analytical value of: 23 %. (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 : SANS 10228:2012 The identification and classification of dangerous goods for communication : 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 : 2022/09/29, Version: 1, Revision: -

Revision(s) : Not applicable

Summary of Mixture Hazard Classification and Categories

Hazard Information : Not deemed hazardous based on available information.

Summary of Mixture Hazard Statements

Hazard Statements : No data available.

Signal word : NONE - Not deemed hazardous based on available information.

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.