


SAFETY DATA SHEET

Prepared on Commission Regulation (EU) no. 453/2010

1. Identification of the substance/mixture and of the company/undertaking			
Product/substance name	Lancer 100 SL		Revision Date: 23/05/2022 Publish Date: 23/05/2022
Product/substance name Herbicide	CAS Number 57754-85-5	EINECS Number 260-929-4	Index Number -
Supplier	Future Farm & Forest Services & Supplies (Pty) Ltd P.O. BOX 98165 SLOANE PARK 2152 EMERGENCY CONTACT Tel: (+27) 11 463 5842		
Regd. Office:	Future Farm & Forest Services & Supplies (Pty) Ltd P.O. BOX 98165 SLOANE PARK 2152 EMERGENCY CONTACT Tel: (+27) 11 463 5842		
Emergency telephone number	Transport accident: 086 100 0366 Treatment for poisoning cases: 082 446 8946		

2. Hazards identification	
Classification of the substance or mixture	
Acute aquatic toxicity	Category 1: (H400)
Chronic aquatic toxicity	Category 1: (H410)
Label Elements	
Hazard pictograms	
	
Signal word	WARNING
Hazard statements	H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements	P273 - Avoid release to the environment. – <i>if this is not the intended use</i> . P391 - Collect spillage. P501 - Dispose of contents/container in accordance with applicable regulations.
Supplemental information	EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
<u>Other Hazards</u>	No information available

3. Composition/information on ingredients

Mixture

Chemical Name	Weight (%)	CAS No	EC No	GHS Classification
Clopyralid monoethanolamine salt	12.5	57754-85-5	260-929-4	Aquatic Chronic 1 (H410)

4. First aid measures

First aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection! If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Immediate medical attention is required.
Skin Contact	Immediately remove contaminated clothing and flush body and clothes with large amounts of soap and water. Rinse skin immediately with plenty of water for 15-20 minutes. Wash contaminated clothing before re-use. Seek medical assistance if irritation persists.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Immediately consult an ophthalmologist and show this SDS or the label or the packaging.
Ingestion	No emergency medical treatment necessary.

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed**Notes to physician:**

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor or going for treatment.

5. Firefighting measures**Extinguishing media****Suitable extinguishing media:**

To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

Unsuitable extinguishing media:

No data available

Special hazards arising from the substance or mixture**Hazardous combustion products:**

Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards:

This material will not burn until the water has evaporated. Residue can burn.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special protective equipment for firefighters:

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Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up:

Contain spilled material if possible.

Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers.

Large spills: Contact the company for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

7. Handling and storage

Precautions for safe handling:

Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling. Use with adequate ventilation.

See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage:

Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

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8. Exposure controls/personal protection

Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Personal protective equipment

Eye/face protection Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

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Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or were indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2 (meeting standard EN 14387).

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and chemical properties

Physical and Chemical Properties

Property	Values	Methods	Remarks
Appearance			
Physical state	: Liquid		
Color	: Yellow		
Odor	: Acidic		
Odor threshold	: No test data available		
pH	: 7.55	CIPAC MT 75.1 (neat)	
Melting point/freezing point (°C)	: Not applicable		
Boiling point/boiling range (°C)	: No test data available		
Flash point (°C)	: None	Closed cup	
Evaporation rate (Butyl Acetate = 1)	: No test data available		
Flammability (solid, gas)	: Not applicable to liquids		
Upper/lower flammability or explosive limits	: No test data available		
Vapor pressure (kPa)	: No test data available		
Vapor density	: Not applicable		
Relative density (water = 1)	: 1.06 at 20 °C	Digital Density Meter (Oscillating Coil)	
Solubility(ies) (mg/l)	: Soluble		
Partition Coefficient (n-octanol/water) Log Pow:	: No data available		
Auto-ignition temperature (°C)	: None	EC Method A15	below 400 °C
Decomposition temperature (°C)	: No test data available		
Dynamic viscosity (mPa.s at 20 °C)	: 1.76		

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Kinematic viscosity (mm ² /s 40 °C)	:	No test data available	
Explosive properties	:	No	EEC A14
Oxidizing properties	:	No	
Other Information			
Bulk density (g/ml)	:	No data available	
Liquid Density (g/cm ³)	:	1.047	Digital density meter at 20 °C
Surface tension (mN/ml)	:	71	at 20 °C

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Stable under normal conditions.
<u>Possibility of Hazardous Reactions</u>	
Hazardous polymerization:	Polymerization will not occur.
Conditions to avoid:	Some components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.
Incompatible Materials:	Avoid contact with: Acids. Halogenated organics. Oxidizers. Avoid contact with metals such as: Copper. Zinc. Aluminum.
Hazardous Decomposition Products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen chloride. Nitrogen oxides.

11. Toxicological information

Information on toxicological effects

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Remarks</u>
Oral (LD50 mg/kg)	: > 5 000 (Estimated)	Rat	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
Dermal (LD50 mg/kg)	: > 5 000 (Estimated)	Rabbit	No deaths occurred at this concentration.
Inhalation (LC50 mg/l/4h)	: > 1	Rat	No adverse effects are anticipated from

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	(Maximum attainable concentration)		single exposure to mist. Mist may cause irritation of upper respiratory tract (nose and throat).
Skin corrosion/irritation	: -	-	Brief contact is essentially nonirritating to skin. Prolonged contact may cause slight skin irritation with local redness. Repeated contact may cause slight skin irritation with local redness. May cause more severe response on covered skin (under clothing, gloves). May cause more severe response if skin is abraded (scratched or cut).
Serious eye damage/eye irritation	: -	-	May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.
Respiratory/skin sensitization	: -	-	Did not demonstrate the potential for contact allergy in mice. For respiratory sensitization: No relevant data found.
<u>Chronic toxicity</u>			
Germ cell mutagenicity	: -	-	In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Carcinogenicity	: -	-	Did not cause cancer in laboratory animals.
Reproductive toxicity	: -	-	Clopyralid caused birth defects in test animals, but only at greatly exaggerated doses that were severely toxic to the mothers. No birth defects were observed in animals given clopyralid at doses several times greater than those expected during normal exposure.
STOT - single exposure	: -	-	Evaluation of available data suggests that this material is not an STOT-SE toxicant.
STOT - repeated exposure	: -	-	Based on available data, repeated exposures are not anticipated to cause significant adverse effects.
Aspiration hazard	: -	-	Based on physical properties, not likely to be an aspiration hazard.

12. Ecological information

Toxicity

Aquatic toxicity

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish (96-hour LC50 mg/l)	: > 99.9	<i>Oncorhynchus mykiss</i> (rainbow trout)	Static test	Material is not classified as dangerous to aquatic organisms, but are to aquatic plants
Crustacea (48-hour EC50 mg/l)	: > 99.9	<i>Daphnia magna</i> (Water flea)		
Other Algae or other aquatic	: 0.0089	<i>Myriophyllum</i>		

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plants (NOEC, LC50 mg/l)

spicatum
(watermilfoil)**Long-term (chronic) aquatic hazard**

Chronic toxicity to fish (21 d EC50 mg/l)	:	125	<i>Oncorhynchus</i>	NOEC
	:	250	<i>mykiss</i> (rainbow trout)	LOEC

Terrestrial Toxicity

Bees Oral LD50 (µg/bee)	:	> 2 136	<i>Apis mellifera</i>	48 Hour
Bees Contact LD50 (µg/bee)	:	> 1 047	(bees)	

Toxicity to soil-dwelling organisms

Earthworms LD50 (mg/kg)	:	1 000	<i>Eisenia fetida</i>	14 d
			(earthworms)	

Persistence and degradability

Biodegradation	:	-	-	Fails to pass OECD/EEC tests for ready biodegradability.	Material is expected to biodegrade very slowly (in the environment).
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Bioaccumulative potential

Partition Coefficient (n-octanol/water)	:	< 3		Bioconcentration potential is low
Partition Coefficient (n-octanol/water)				
Log Pow				
Bioconcentration factor (BCF)	:	< 100		

Mobility in soil

Adsorption/Desorption	:	Koc between 0 and 50	Potential for mobility in soil is very high
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Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Other adverse effects

No information available.

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13. Disposal considerations

Waste treatment methods

Waste from residues/unused products: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Contaminated packaging: Improper disposal or reuse of this container may be dangerous and illegal.

Other Information: Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport information

Classification for ROAD and Rail transport:

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Clopyralid)
Class	9
Packing group	III
Environmental hazards	Clopyralid

Classification for SEA transport (IMO-IMDG):

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Clopyralid)
Class	9
Packing group	III
Environmental hazards	Clopyralid

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

UN number	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Clopyralid)
Class	9
Packing group	III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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15. Regulatory information

Safety, health, and environmental regulations/legislation specific for the substance or mixture

National legislation:

- Regulations For Hazardous Chemical Agents, 2021 as Amended by Notice R 11266 in GG 44366 of 31 March 2021 Republic Of South Africa.
- Occupational Health and Safety Act (Act No. 85 of 1993) as amended.
- Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No. 36 of 1947) as amended. Registration No. L6802 Department of Agriculture, Land Reform and Rural Development.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Contact:

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Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

This Safety Data Sheet (SDS) complies with basic South African and EU regulatory requirements for SDS on the date of publication and is intended for translation and adaptation into European National documents. This document should NOT be relied upon for compliance with the laws and

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regulations of individual countries without the appropriate local translations and adaptations. It is your responsibility to ensure that any SDS taken or adapted from this system for re-distribution or use complies with all the laws and regulations which apply to any such use or re-distribution.

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