



Novagen Innovations (Pty) Ltd. t/a Agri Novagenix
Company registration number: 2020/891524/07 ; VAT: 4150295469
PO Box 1224, Isando, 1600, South Africa

SAFETY DATA SHEET OXYFLO

Reg. No. /Nr L11913, Act/Wet No. /Nr 36 Of Van 1947

Section 1. Identification of the material and the supplier

Product: **OXYFLO**
Product Use: Herbicide
Restriction of Use: Refer to Section 15

Supplier: **Novagen Innovations (Pty) Ltd t/a Agri Novagenix**
PO Box 1224
Isando, 1600
South Africa
www.novagenag.co.za

Emergency No: POISON CENTRE (UNITAS HOSPITAL) 012 664 1100
TYGERBERG 021 931 6129
RED CROSS 021 689 5227
RAPID SPILL RESPONSE 0800 775 3305
GRIFFON POISON CENTRE 082 446 8946

Date of SDS Preparation: 5 February 2025

Section 2. Hazards Identification

Classification of the substance or mixture

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Skin Irritation Category 3; H316
Skin Sensitization Category 1; H317
STOT RE Category 2; H373
Short-term (Acute) Aquatic hazard Category 1; H400
Long-term (Chronic) Aquatic toxicity Category 1; H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Label elements

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Pictograms



Signal Word: **WARNING**

Hazard statement(s)

H316: Causes mild skin irritation.

H317: May cause an allergic skin reaction.

H373: May cause damage to organs through prolonged or repeated exposure.

H410: Very to aquatic life with long lasting effects.

Precautionary statement(s)

General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read carefully and follow all instructions.

Prevention:

P260 - Do not breathe dust/fume/mist/vapours/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves.

P273 - Avoid release to the environment.

Response:

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P319 - Get medical help if you feel unwell.

P333 + P317 - If skin irritation or rash occurs: Get medical help.

P321 - Specific treatment (see Section 4).

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

Storage:

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Disposal:

P501 - Dispose of contents/container in accordance with national regulations.

Supplemental Hazard Statements: none

2.3 Other

Other hazards

No other hazards known

Section 3. Composition / Information on Hazardous Ingredients
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Mixture

Suspension concentrate

Oxyfluorfen 480 g/L

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Ingredients	Concentration of hazardous ingredient	CAS Number	Classification
Oxyfluorfen	48%	42874-03-3	Aquatic Acute Cat. 1; H400 Aquatic Chronic Cat. 1; H410
Ethylene glycol	>1-<10%	104700-12-1	Acute Tox. Oral Cat. 4; H302 STOT RE Cat. 2; H373
Sodium salt of naphthalene condensed	>1-<10%	36290-04-7	Skin Irrit. 2; H315 Eye Irrit. 2; H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4. First Aid Measures

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Routes of Exposure:

- If in Eyes Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Suitable emergency eye wash facility should be available in work area. **Seek medical attention.**
- If on Skin Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Suitable emergency safety shower facility should be available in work area. **Seek medical attention.**
- If Swallowed Do not induce vomiting. Wash out the patient's mouth and give the patient water to drink if the patient is alert and able. **Seek medical attention.**
- If Inhaled Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). **Seek medical attention.**

Most important symptoms and effects, both acute and delayed

Symptoms: Treat symptomatically. 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.

Treatment:

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.

Section 5. Fire Fighting Measures

Hazards from products	This material will not burn until the water has evaporated. Residue can burn. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes
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	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 fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.
Suitable Extinguishing media	To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.
Recommended protective clothing & Precautions for firefighters	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 SDS. 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.

Section 6. Accidental Release Measures

Personal precautions:

All personnel handling this material must be thoroughly trained on how to handle spills and releases. Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.

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. Spills or discharge to natural waterways is likely to kill aquatic organisms.

Spill and Disposal procedures:

Cleaning procedure:

Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labelled containers. See Section 13, Disposal Considerations, for additional information

Waste Disposal: In accordance with local and national regulations. Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Container Disposal: Refer to the product label for instructions. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.

Reference to other sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

Section 7. Handling and Storage

Precautions for Handling:

Keep out of reach of children and animals.

All personnel handling this product must be thoroughly trained regarding its hazards.

Use with adequate ventilation.

Avoid contact with skin, eyes and clothing.

Wash hands after use and before eating, drinking, chewing gum, smoking, or using the toilet. Operators must change and wash clothing daily. Remove clothing immediately if the pesticide gets inside. Thereafter, wash skin thoroughly with plenty of water and a non-abrasive soap and put on clean clothing.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. All water used to clean equipment must be disposed of correctly in order to avoid contamination.

Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Precautions for Storage:

Store in original container tightly closed and in a locked, dry, cool, well-ventilated area away from heat, open flame, water supplies, foodstuffs, fertilisers, and seeds.

Keep away from children, animals or unauthorised persons.

Avoid extreme temperatures.

Do not store in or around the home.

Never transfer this product to another container for storage.

Do not permit prolonged storage in areas where the temperature frequently exceeds 46°C.

Store in compliance with local regulations.

Specific end use(s): Use only according to the label.

Section 8 Exposure Controls / Personal Protection

Occupational exposure limits:

Component	Value type (Form of exposure)	Control parameters / permissible concentration	Regulation
Oxyfluorfen	TWA	0.2 mg/m ³	Dow IHG

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Controls / Industrial Hygiene

Comply with occupational safety, environmental, fire and other applicable regulations.

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

If engineering controls and work practices are not effective in controlling exposure to this material, wear suitable personal protective equipment including approved respiratory protection.

Personal Protection Equipment

Eyes	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Hands	Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 3 or higher (breakthrough time greater than 60 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.
Skin	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Respiratory	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 where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.
General	Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Yellow
Odour	No data available
Odour Threshold	No data available
pH	6.5 – 8.5 (1 % aqueous dilution)
Boiling/Melting Point	No data available
Freezing Point	No data available
Flash Point	No data available
Flammability	No data available
Upper and Lower Explosive Limits	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Density	1.1
Water Solubility	Suspends in water.
Partition Coefficient:	No data available
Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	No data available
Surface tension	No data available

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal use and standard conditions. Stable for 24 months. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight. When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Avoid temperature extremes.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Protect from extreme temperatures, direct sunlight.
Incompatible Materials	Avoid contact with strong oxidizing agents, strong bases and strong acids. Store only in the original container.
Hazardous Decomposition Products	No decomposition if stored and handled as indicated.

Section 11 Toxicological Information

Acute Effects:

Oral	GHS: Not classified
Dermal	GHS: Not classified
Inhalation	GHS: Not classified
Eye	GHS: Not classified
Skin	GHS: Skin Irritation Cat. 3 GHS: Skin Sensitization Cat. 1

Chronic Effects:

Carcinogenicity	GHS: Not classified
Reproductive Toxicity	GHS: Not classified
Germ Cell Mutagenicity	GHS: Not classified
Aspiration	GHS: Not classified
STOT/SE	GHS: Not classified
STOT/RE	GHS: Category 2

Section 12. Ecotoxicological Information

Ecological effects information	GHS: Short-term (Acute) Aquatic hazard Category 1 Long-term (Chronic) Aquatic toxicity Category 1
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible. If containers cannot be recycled, they should be disposed of together with the waste chemical.

Do not reuse empty containers. Empty containers retain product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used for transport. If recycling, close container and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and take to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal.

Special precautions during disposal:

Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Triple rinse containers, add rinsate to the spray tank, then offer the container for

recycling/reconditioning, or puncture top, sides and bottom and take to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal.

If on-site container disposal is necessary, triple rinse empty container with water, add rinsate to the spray tank. Puncture top, sides and bottom, crush, and store appropriately until it can be taken to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal.

Empty containers and product should not be burnt.

Section 14 Transport Information

Rail/road (RID/ADR):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXYFLUORFEN)
UN number	3082
Class	9
Packing group	III
Environm. Haz. Mark	Yes

Sea (IMDG code):

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

Air (ICAO/IATA):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXYFLUORFEN)
UN number	3082
Class	9
Packing group	III
Environm. Haz. Mark	Yes

Section 15 Regulatory Information

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16 Other Information

Full text of H-Statements referred to under sections 2 and 3.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H316: Causes mild skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS-Nr. Chemical Abstracts Service number

CLP Classification, Labelling and Packaging

ECHA – European Chemicals Agency

EC-No. European community number

EU European Union

GHS Globally Harmonized System

IATA International Air Transport Association

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

PBT Persistence, Bioaccumulation and Toxic

vPvB Very persistent and very bioaccumulative

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

STOT SE Specific target organ toxicity single exposure.

STOT RE Specific target organ toxicity repeated exposure.

TWA Time weighted average

UN United Nations

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

The information herein is given in good faith, but no warranty, express or implied is made.

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