

Safety Data Sheet

2,4-DMAX HL - Reg. No: L10725 (Act No 36 of 1947)

Date of issue: 20/08/2019

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	2,4-DMAX HL
Other means of identification:	2,4-D 720 g/L SL
UN number:	3082
Recommended use:	Herbicide
Restrictions on use:	Agriculture
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	(2,4-dichlorophenoxy) acetic acid
2) Classification of the substance / mixture:	
Classification of the product:	According to Directive 67/548/EEC or 1999/45/EC : Xi, Xn; R22, R37, R41, R43R52/53; S2, S24/25, S26, S36/37/39, S46, S61 Full text of R-phrases; see section 15
Label elements:	<p>Hazard statement(s): H302: Harmful if swallowed H318: Causes serious eye damage. H317: May cause an allergic skin reaction. H335: May cause respiratory irritation. H412: Harmful to aquatic life with long-lasting effects.</p> <p>Precautionary statement (s): P102 Keep out of reach of children. P270 Do not eat, drink or smoke when using this product. P284 Wear respiratory protection. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314 Get medical advice/attention if you feel unwell. P391 Collect spillage. P501 Dispose of contents/container to an approved waste disposal plant.</p> <p>Other hazards: No other hazards known.</p> <p>Pictogram:</p>



Signal Word: **WARNING**

Health effects: eyes:	Irritating to eyes
Health effects: skin:	Not irritating, non-sensitizer
Health effects: ingestion	Harmful if swallowed
Health effects: inhalation	Exposure through inhalation is unlikely.
Health effects: Other	

3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture: 2,4-D 720 g/L

Chemical name	% Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
2,4-D	72	94-75-7	202-361-1	R22, R37, R41 R43, R52/53 S2, S24/25, S26 S36/37/39, S46, S61	Xi
Dimethylamine		124-40-3	204-40-3	R12, R20, R37/38, R41 S2, S16, S26, S39	F+ Xn

Full text of R- and S-phrases: see section 15.

4) First Aid Measures:

Eye contact:	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.
Skin contact:	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Seek medical assistance should irritation persist.
Ingestion:	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. One or two glasses of water may be given. For advice, contact the National Poisons Centre. Seek medical assistance immediately.
Inhalation:	Lie the patient down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and administer oxygen. Seek medical assistance immediately if irritation persists. Seek medical assistance.
Most important symptoms and effects, acute and delayed:	Exposure may cause nausea, vomiting, dizziness, temporary loss of vision, abdominal pain, diarrhoea, headache, hypotension, confusion, aggression, bizarre behavior, muscle twitching, muscle weakness, loss of muscle coordination, muscle stiffness, loss of tendon reflexes, coughing or burning sensations in the upper respiratory tract and chest. Some of these symptoms may persist for a length of time or even be permanent
Indication of immediate medical attention and special	No antidote is known. Treat symptomatically and

<p>treatment needed: Advice to physician</p>	<p>supportively as and when needed. If large quantities have been ingested, gastric lavage may be considered as well as the administration of activated charcoal.</p>
<p>5) Fire-Fighting Measures:</p>	
<p>Suitable extinguishing media:</p> <p>Unsuitable extinguishing media:</p> <p>Special hazards arising from the substance or mixture:</p>	<p>Dry chemical, carbon dioxide (CO₂), water spray, alcohol-resistant foam.</p> <p>Do not use high volume water jet, due to contamination risk.</p> <p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion.</p>
<p>Fire-fighting:</p>	<p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.</p> <p>Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal.</p> <p>Generating poisonous and corrosive fumes. Keep upwind.</p> <p>Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal..</p> <p>Do not scatter the material. Bund area with sand or earth to avoid pollution of waterways. Water can be used to cool containers. Dispose of extinguishing agent and spillage in a safe way at a later stage.</p> <p>Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.</p> <p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion.</p>
<p>Protective clothing:</p>	<p>Full protective clothing and self-contained breathing apparatus</p>
<p>6) Accidental Release Measures:</p>	
<p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Cleaning procedure:</p>	<p>Do not inhale vapour or spray. Avoid contact with skin and eyes. For personal protection see section 8.</p> <p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.</p> <p>Wear protective clothing. Clear area of unprotected personnel. Contain and absorb liquid spills with inert material and place in waste containers. Wash area with water containing soda or detergent and absorb with further inert material. If spill does enter waterways contact the local authority. Heavily contaminated soil layers should be removed and disposed of in an approved way. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical</p>

Eye protection:	mm) etc. The use of safety goggles with side shields is recommended.
Respiratory protection:	Wear respirator if ventilation is inadequate or exposure to high levels are likely
Emergency eye wash:	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.

9) Physical & Chemical Properties:

Form:	Liquid, Soluble concentrate
Colour:	Clear pale yellow to beige liquid
Odour:	Amine odour
Odour threshold:	No data available
pH:	10.0-12.0
Melting point / Freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas)	Not auto flammable below 400°C
Upper/ lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	Approximately 1.34 g/L
Solubility(ies)	Miscible in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature:	No data available
Viscosity:	No data available

10) Stability & Reactivity:

Reactivity:	No hazardous reactions known. Hazardous polymerisation does not occur. Combustion or thermal decomposition will evolve toxic and irritating vapours. Stable under normal conditions.
Chemical stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Thermally and chemically stable.
Hazardous decomposition product(s):	No hazardous reactions decomposition if stored and handled as indicated.
Conditions to avoid:	No data available.
Incompatible materials:	No data available. Store only in the original container.

11) Toxicological Information:

Acute:

Oral LD50 : 300 - 2 000 mg/kg, rat

Dermal LD50 : > 2 000 mg/kg, rat

Inhalation LC50 (4h): Rat LC₅₀ > 5.06 mg/L air

Skin irritation : Non-Irritant, rabbit

Eye irritation : Irritant, rabbit

Sensitisation : Not a sensitizer (Guinea pig)

Other :

Repeated dose toxicity:

No data Available

Mutagenicity:

No data Available

Carcinogenicity:

No data Available

Reproductive toxicity:

No data Available

Teratogenicity:

No data Available

12) Ecological Information:

Information below based on active ingredient: Fluazifop-*p*-butyl technical material

Bees: LD₅₀ µg/bees: 104.5 (oral)

Birds: Acute oral LD₅₀ for wild ducks >1000 mg/kg. Acute oral LD₅₀ for Japanese quail 668 >2000 mg/kg.

Fish : LC₅₀ (96 h) for rainbow trout >100 mg/L, LC₅₀ (96 h) for bluegill sunfish 9.6 µg/L.

Worms: LC₅₀ (7 d) 860 mg/kg; NOEC (14 d) 100 g/kg.

Algae : EC₅₀ (5 d) for *Selenastrum capricornutum* 33.2 mg/l..

Daphnia : EC₅₀ (48 h) 0.34 ppb.

Other aquatic species: Low toxicity to aquatic invertebrates.

Environments fate

Persistence and degradability:

Under most environmental conditions 2,4-D amines will degrade rapidly to form 2,4-D acid which generally has a low persistence under normal conditions. The half-life in normal soil conditions is 7 days and micro-organisms readily degrade 2,4-D under normal aquatic conditions.

Not persistent in water

Biodegradability: Not readily biodegradable

Bioaccumulative potential

Bioaccumulation: Does not bioaccumulate.

Mobility in soil

2,4-D has a low binding affinity in mineral soils and sediment, and in those conditions, is considered intermediately to highly mobile.

Results of PBT and vPvB assessment

PBT and vPvB assessment: This substance is not considered to be persistent, bio accumulative and toxic (PBT). This substance is not considered to be very persistent and very bio accumulative (vPvB).

Other adverse effects:

Additional ecological information: No other effects to be mentioned.

13) Disposal Considerations:

Waste Disposal: In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Refer to the product label for instructions. Triple rinse empty containers before disposal in the following manner: Invert the container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container volume. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Empty containers should not be burnt; puncture and flatten containers and dispose at a licensed landfill site according to local regulations. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Prevent contamination of water sources, food or feed by disposal. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** If recycling, replace cap and take containers to the designated recycling point. If containers cannot be recycled, they should be disposed of together with the waste chemical according to local regulations.

14) Transportation Information:

UN NUMBER: 3082

Road Transport ADR/ RID:

Class: 9

Packaging group: III

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S.

Environmental hazards: Environmentally hazardous. Marine pollutant.

Special precautions for user: None known.

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S.

Environmental hazards: Environmentally hazardous. Marine pollutant.

Special precautions for user: None known.

MARINE POLLUTANT

Air (ICAO / IATA):

Class: 9

Packaging group: III

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S.

Environmental hazards: Environmentally hazardous. Marine pollutant.

Special precautions for user: None known.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code): NA

15) Regulatory Information:**Safety, health and environmental regulations / legislation specific for the substance or mixture.**

To avoid risks to man and the environment, comply with all instructions for use.

Advice on handling of the product can be found in sections 7 and 8 of this safety data sheet.

For the proper and safe use of this product, please refer to the approval conditions indicated in the product label.

Labelling according to EC directives:

Hazardous components which must be listed on the label: 2,4-D

Symbols: Xn – Harmful

Xi: Irritant

F+: Flammable



Risk-phrase(s):

R12: Extremely flammable.

R20: Harmful by inhalation.

R22: Harmful if swallowed.

R37: Irritating to respiratory system.

R37/38: Irritating to respiratory system and skin.

R41: Risk of serious damage to eyes.

R43: May cause sensitization by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety-phrase(s):

S2: Keep out of reach of children

S13: Keep away from food, drink and animal feeding stuffs.

S16: Keep away from sources of ignition – no smoking.

S20/21: When using, do not eat, drink or smoke.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39: Wear eye / face protection.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S46: If swallowed, seek medical advice immediately and show this container or label.

S61: Avoid release to the environment. Refer to special instructions / Safety data sheets.

Special labelling of certain mixtures:

To avoid risks to man and the environment, comply with the instructions for use.

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSES OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.