


Safety Data Sheet

PHOSTEMIC XTRA - Reg. No: L 10125 (Act No 36 of 1947)

Date of issue: 22/09/2016

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	PHOSTEMIC XTRA
Other means of identification Recommended use:	Phosphorous acid/Cymoxanil/Dimethomorph 320 SC Fungicide
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 TYGERBERG:021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	Phosphorous acid: phosphonic acid Cymoxanil: 2-cyano-N-[(ethylamino)carbonyl]-2-(methoxyimino)acetamide Dimethomorph: 4-(3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl)morpholine
2) Classification of the substance / mixture:	
Classification of the product is based on the co-formulants listed in section 3.	Xn, Xi, C, F+, N, R12, R20, R22, R35, R37/38, R41, R43, R50-53; R51-53 Full text of R-phrases: see section 15.
Label elements:	Hazard symbols: Xn – Harmful N – Dangerous for the environment F+ - Flammable (individual components; see below) C – Corrosive  Signal Word: Danger
Health effects: eyes:	May cause irritation.
Health effects: skin:	May cause severe irritation and sensitisation.
Health effects: ingestion	Harmful if swallowed.
Health effects: inhalation	May cause irritation to the respiratory system.

3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Phosphorous acid	240 g/L	13598-36-2	237-066-7	Acute Tox. 4 (H302) Skin corr. 1A (H314)	Xn, C, R22, R35; S1/2, S26, S36/37/39, S45
Cymoxanil	40 g/L	57966-95-7	261-043-0	Acute Tox. 4 (H302) Skin Sens.1 (H317) Repr. 2 (H361fd) STOT RE 2 (H373) Aquatic Acute (H400) Aquatic Chronic 1 (H410)	Xn, N, R22, R43, R50-53; S2, S36/37, S60, S61
Dimethomorph	40 g/L	110488-70-5	404-200-2	Aquatic Chronic 2 (H411)	N, R51-53; S 61
DMA	< 25%	124-40-3	204-697-4	Flam. Liq. 1 (H224) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Acute Tox 4. (H302, H332)	F+, Xn, C, R12, R20/22, R34; S1/2, S3 S16, S26, S29, S36/37/39, S45
MEG	< 5%	107-21-1	203-473-3	Acute Tox. 4 (H302)	Xn, R22; S2

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

4) First Aid Measures:

<p>Eye contact:</p> <p>Skin contact:</p> <p>Ingestion:</p> <p>Inhalation:</p> <p>Indication of immediate medical attention and special treatment needed: Advice to physician</p>	<p>Immediately flush eyes with plenty of water. Remove contact lenses, if worn, and flush eyes with water for at least 15 minutes, holding eyelids open. Seek medical assistance immediately.</p> <p>Gently wipe off excess chemical. Immediately flush skin with water for at least 15 minutes, remove contaminated clothing and shoes and thoroughly wash body with non-abrasive soap and water. Seek medical attention immediately. Wash contaminated clothing before re-use. Persons who become sensitized may require medical management.</p> <p>If swallowed, do not induce vomiting: seek medical advice immediately and show this document. Never give anything by mouth to an unconscious person. If victim is alert, rinse mouth thoroughly with water and give victim large volumes of water or milk to drink. Keep victim calm. Qualified personnel should administer oxygen.</p> <p>Remove victim to well ventilated area and loosen clothing around the neck. Keep victim calm and warm. Qualified personnel should administer oxygen. Seek medical attention immediately.</p> <p>Symptomatic treatment, no specific antidote known. If product has been ingested, avoid gastric lavage and emesis. Give victim large volumes of water or milk to drink.</p>
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5) Fire-Fighting Measures:

<p>Suitable extinguishing media:</p> <p>Fire fighting:</p>	<p>Water spray, foam, carbon dioxide (CO₂), dry powder.</p> <p>In case of a fire, do not breathe fumes or vapours from burning materials. Remove spectators from surrounding area. Use a recommended extinguishing agent. Fight fire from a maximum distance and use an unmanned hose holder or monitor nozzles. Do not use a high volume water jet, due to risk of spreading and contamination. Dike extinguishing media for later disposal, do not allow to reach sewage or water systems. Dispose of fire debris and contaminated extinguishing water according to regulations. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways.</p>
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Protective clothing:	<p>Fire may produce irritating or poisonous vapours such as Nitrogen oxides, mists or other products of combustion. Do not breathe fumes.</p> <p>Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.</p>
6) Accidental Release Measures:	
Personal precautions: Environmental precautions: Cleaning procedure: Disposal:	<p>Do not breathe vapour or spray. Avoid contact with skin, eyes and clothing. Keep away from sources of ignition. Wear personal protective clothing according to operator safety during removal of spillage. Ensure good ventilation.</p> <p>Do not contaminate waterways, drains and groundwater. Do not discharge into soil or subsoil. Notify government occupational health, safety and environmental authorities if product should enter water sources. Considered a marine pollutant.</p> <p>Do not eat, drink or smoke during the clean-up process. Keep away from sources of ignition. Clear area of unprotected personnel. Wear protective gear as mentioned in section 8 below. Contain the spill and stop leak provided it is safe to do so. Soak up minor spills with suitable absorbent material such as sand, diatomaceous earth or other non-combustible material. For large spills, dike spill with absorptive material. Collect waste in a suitable container which can be labelled and sealed for disposal according to local regulations. Clean contaminated areas thoroughly with water containing detergent. Collect washings to avoid any contamination of surface and ground water, water supplies and drains. Deal with spillages immediately. If contamination of waterways or drains is unavoidable, warn the local authorities immediately.</p> <p>Used absorbent material should be stored in labelled, sealable containers until these can be disposed of according to local regulations. Open burning or dumping of this.</p>
7) Handling & Storage:	
Handling: Storage:	<p>Do not breathe in fumes or spray. Ensure thorough ventilation of work and storage areas. Avoid contact with skin, eyes and clothes. Do not eat, drink, smoke or apply cosmetics while using. Wash hands thoroughly with a non-abrasive soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Sources of ignition should be kept a safe distance away and fire extinguishers should be kept within reach. Do not apply directly to areas where surface water is present. Water used to clean equipment must be disposed of correctly to avoid contamination.</p> <p>Store in a dry, cool place, out of direct sunlight, away from sources of ignition and away from foodstuffs, fertilisers and seeds. Store under lock and key, keep away from animals, children or uninformed persons. Do not contaminate water, food or feed by storage or disposal.</p>
8) Exposure Control / Personal Protection:	
<p>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.</p> <p><u>PERSONAL PROTECTIVE EQUIPMENT:</u> Clothing:</p> <p>Gloves:</p>	<p>Employee must wear appropriate protective (impervious) clothing to prevent prolonged skin contact with this product e.g. chemical resistant apron, rubber boots and closed body suit.</p>

<p>Eye protection:</p> <p>Respiratory protection:</p> <p>Emergency eye wash:</p>	<p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.</p> <p>The use of safety goggles with side-shields is recommended.</p> <p>Wear suitable respiratory equipment to protect from vapours and spray mist.</p> <p>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.</p>
<p>9) Physical & Chemical Properties:</p>	
<p>Form:</p> <p>Colour:</p> <p>Odour:</p> <p>Odour threshold:</p> <p>pH:</p> <p>Melting point / Freezing point</p> <p>Initial boiling point and boiling range</p> <p>Flash point:</p> <p>Evaporation rate:</p> <p>Flammability (solid, gas)</p> <p>Upper/ lower flammability or explosive limits:</p> <p>Vapour pressure:</p> <p>Vapour density:</p> <p>Relative density:</p> <p>Solubility(ies)</p> <p>Partition coefficient: n-octanol/water</p> <p>Auto-ignition temperature:</p> <p>Viscosity:</p>	<p>Liquid, suspension concentrate</p> <p>Off white to tan liquid</p> <p>Characteristic</p> <p>No data available</p> <p>2 - 4</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>Not flammable (individual components may be flammable)</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>1.09 g/l</p> <p>Suspends in water</p> <p>No data available</p> <p>No data available</p> <p>No data available</p>
<p>10) Stability & Reactivity:</p>	
<p>Reactivity:</p> <p>Chemical stability:</p> <p>Hazardous decomposition product(s):</p> <p>Conditions to avoid:</p> <p>Incompatible materials:</p>	<p>Stable under normal storage conditions.</p> <p>When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.</p> <p>Fires can release vapours that are irritating or toxic for example nitrogen oxides, ammonia, phosphorous oxides, flammable hydrogen and phosphine gases.</p> <p>Protect from direct sunlight, heat, flames and other sources of ignition.</p> <p>Strong bases, strong acids, strong oxidising agents.</p>
<p>11) Toxicological Information:</p>	
<p>Acute:</p> <p>Oral LD50 > 1 500 mg/kg, rat.</p> <p>Dermal LD50 > 5 000 mg/kg, rat.</p> <p>Inhalation LC50 4h > 5.06 mg/L, rat (Cymoxanil)</p> <p>> 4.2 mg/L, rat (Dimethomorph)</p> <p>Skin irritation : Irritating, rabbit (Phosphorous acid).</p> <p>: Slight irritant, rabbit (Cymoxanil)</p> <p>: Not an irritant, rabbit (Dimethomorph).</p> <p>Eye irritation : Irritating, rabbit (Phosphorous acid).</p> <p>: Not an irritant, rabbit (Dimethomorph, Cymoxanil).</p> <p>Skin sensitiser : This active is corrosive (Phosphorous acid)</p> <p>: Not a skin sensitiser (Dimethomorph, Cymoxanil).</p> <p>Phosphorous acid is not expected to harm humans, not a carcinogen, not an endocrine disruptor with no effects on reproduction and development.</p> <p>Cymoxanil may cause harm to an unborn child.</p> <p>Dimethomorph has no oncogenic potential.</p>	
<p>12) Ecological Information:</p>	
<p>Based on Active Ingredients:</p> <p>Bees : Practically non-toxic (Phosphorous acid, Cymoxanil).</p> <p>Oral LD50 (48h) > 32.4 µg/bee, LD50 contact > 102 µg/bee (Dimethomorph).</p> <p>Birds : Acute oral LD50 > 2 250 mg/kg bobwhite quail and mallard ducks (Cymoxanil).</p> <p>Acute oral LD50 > 2 000 mg/kg bobwhite quail and mallard ducks (Dimethomorph).</p> <p>Fish : LC50 > 100 mg/L (Phosphorous acid).</p>	

: LC₅₀ (96h) rainbow trout 61 mg/L, bluegill sunfish 29 mg/L, common carp 91 mg/L, sheepshead minnows >47.5 mg/L (Cymoxanil).
 : LC₅₀ (96h, static) bluegill sunfish > 25 mg/L, carp 14 mg/L, rainbow trout 6.2 mg/L (Dimethomorph).
 Daphnia : Slightly toxic (Phosphorous acid)
 : LC₅₀ (48h) 27 mg/L (Cymoxanil).
 : EC₅₀ (48h, static) > 10.6 mg/L (Dimethomorph).
 Algae : EC₅₀ (5d) *Selenastrum capricornutum* 1.21 mg/L, EC₅₀ for *Anabena flos-aquae* 231 ppb (Cymoxanil).
 : EC₅₀ (96h) *Scenedesmus subspicatus* 29.2 mg/L (Dimethomorph)
 Worms : LC₅₀ (14d) 2 208 mg/kg soil (Cymoxanil).
 : EC₅₀ earthworms > 1 000 mg/kg soil (Dimethomorph).

Persistence, degradability and motility:

Phosphorous acid: In soil/environment DT₅₀ in soil 16 weeks (Phosphorous acid)
 Cymoxanil: In lab. soils, DT₅₀ 0.75–1.6 d (5 soils, pH range 5.7–7.8, o.m. 0.8–3.5%). In the field, DT₅₀ (bare soil) 0.9–9 d. In aquatic studies, DT₅₀ <1 d. K_{oc} 38–237. Cymoxanil is mobile, adsorption Freundlich K 0.29–2.86 in four soil types.
 Dimethomorph: Moderately mobile (K_d 2.09–11.67 ml/g, K_{oc} 290–566). Aerobic soil metabolism DT₅₀ 41–96 d (20 °C); field dissipation DT₅₀ 34–53 d. Water/sediment DT₅₀ 5–15 d (water), 16–59 d (total system).

Biodegradation: Not available.

Bioaccumulative potential: Not available.

13) Disposal Considerations:

Waste Disposal: Waste should not be re-used. Do not contaminate water sources, food or feed by disposal. Open dumping or burning of this pesticide is prohibited. Wastes resulting from the use of this product should be disposed of by according to local regulations and preferably by an approved chemical waste disposal/incineration facility. Do not dispose of undiluted chemical on site.

Container Disposal: Refer to the product label for instructions. Empty containers retain product and vapour residues. Triple rinse empty containers before disposal. 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 of as recommended for waste product above.

DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

14) Transportation Information:

UN Number: 2902

Road transport ADR/RID

Class: 6.1

Packing group: III

Hazard label: 6.1, EHSM

UN proper shipping name: PESTICIDES, LIQUID, TOXIC, N.O.S (contains 240g/L Phosphorous acid, 40g/L Cymoxanil, 40g/L Dimethomorph)

Maritime transport IMDG/IMO

Class: 6.1

Packing group: III

Hazard label: 6.1, EHSM

UN proper shipping name: PESTICIDES, LIQUID, TOXIC, N.O.S (contains 240g/L Phosphorous acid, 40g/L Cymoxanil, 40g/L Dimethomorph)

Marine pollutant

Air transport IATA/ICAO

Class: 6.1

Packing group: III

Hazard label: 6.1, EHSM

UN proper shipping name: PESTICIDES, LIQUID, TOXIC, N.O.S (contains 240g/L Phosphorous acid, 40g/L Cymoxanil, 40g/L Dimethomorph)



15) Regulatory Information:

Symbols: Xn, Xi, N, F+, C

Risk – Phrase:

R22: Harmful if swallowed.

R35: Causes severe burns.

R22: Harmful if swallowed.

R43: May cause sensitization by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R12: Extremely flammable.

R20/22: Harmful by inhalation and if swallowed.

R34: Causes burns.

R22: Harmful if swallowed.

Safety – Phrase:

S1/2: Keep locked up and out of the reach of children.

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

S36/37/38: Wear suitable protective clothing, gloves and respiratory equipment.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S2: Keep out of the reach of children.

S36/37: Wear suitable protective clothing and gloves.

S60: This container and its contents must be disposed of as hazardous waste.

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

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

S16: Keep away from sources of ignition — No smoking.

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

S29: Do not empty into drains.

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

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S2: Keep out of the reach of children.

Hazard Statements

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction

H361fd: Suspected of damaging the unborn child.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H224: Extremely flammable liquid and vapour.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H332: Harmful if inhaled.

H302: Harmful if swallowed.

Date of revision: 2015/05/20

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.

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