

SAFETY DATA SHEET (SDS)

TITLE: FAMOXADONE 22.5 % + CYMOXANIL 30% WDG

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING**1.1 Product Identifier**

Identification on the label / Trade name : AG CYMEC 525 WG
Common Name : FAMOXADONE 22.5 % + CYMOXANIL 30% w/w
CAS No. : 131807-57-3 - 57966-95-7
EC No. : N/A
Index Number : 612-206-00-3 - 616-035-00-5
REACH registration No. : N/A

1.2 Relevant identified uses of the substance and uses advised against:

Fungicide

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier AGROMECC SARL
P.O.Box: 462
Jounieh, Lebanon
Tel +961 9 226874
E-mail agromec@agromec-international.com
Webpage www.agromec-international.com

1.4 Emergency Phone Number (24 hours)

+961 3 980599

2.0 HAZARDS IDENTIFICATION**2.1 Classification of the mixture:****2.1.1 Classification:**

The substance is classified as following according to REGULATION (EC) No 1272/2008 (CLP).

1272/2008/EU	
Pictograms / Signal word code (s)	Hazard Statement Code (s)
GHS07, GHS08, GHS09, Wng	H302, H317, H361fd, H373, H410

For full text of H-phrases: see section 2.2.1

2.2 Label elements

2.2.1 According to 1272/2008/EU REGULATION

Pictograms / Signal word code (s)



GHS07



GHS09



GHS08

Wng

Hazard Statement Code(s)

H302	:	Harmful if swallowed
H317	:	May cause an allergic skin reaction
H361fd	:	Suspected of damaging fertility and the unborn child
H373	:	May cause damage to organs through prolonged or repeated exposure (blood, thymus)
H400	:	Very toxic to aquatic life
H410	:	Very toxic to aquatic life with long-lasting effects

2.3

Other hazards

Specific concentration Limits and M factors: Not available

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name / CAS No	% w/w	Hazard Pictograms (1272/2008/EC)	Hazard Statements (1272/2008/EC)
Famoxadone / 131807-57-3	22.5	GHS08, GHS09, Wng	H373, H400, H410

Cymoxanil / 57966-95-7	30	GHS07, GHS08, GHS09, Wng	H302, H317, H361fd, H373, H400, H410
Ammonium sulfate / 7783-20-2	35	-	-
Inert materials	to 100%		

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 General information

CAUTION! Harmful if swallowed. May cause irritant if contact with skin or eyes. Avoid contact with eyes, skin, or clothing. Do not breathe vapor or mist. Keep out of reach of children. Keep away from food, drink and animal feed

4.1.2 In case of inhalation

Remove to fresh air. If breathing difficulty or discomfort occurs and persists, see a medical doctor. If breathing has stopped, give artificial respiration and see a medical doctor immediately.

4.1.3 In case of skin contact

Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. See a medical doctor immediately.

4.1.4 In case of eyes contact

Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention

4.1.5 In case of ingestion

Drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with a finger or by giving syrup of ipecac. Never induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

4.1.6 Notes for the doctor

Treat symptomatically. There is no specific antidote.

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Non-flammable and not sensitive to thermal, impact or friction stimuli. Does not self-ignite and is a non-oxidizer

Suitable extinguishing media : Foam, sand, CO₂ or soft stream water fog only if necessary. Contain all runoff.

Unsuitable extinguishing media : Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon monoxide (CO), Nitrogen oxides (NOx)

5.3 Advice for fire-fighters

Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

5.4 Additional information

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Keep unnecessary people away. Use as little water as possible. Dike area of fire to prevent material run-off. Decontaminate emergency personnel with soap and water before leaving the fire area. Avoid breathing dusts, vapors and fumes from burning materials. Control run-off water

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment : Wear protective clothing and personal protective equipment as prescribed in Section 8.

Emergency procedures : In case materials are released, contact emergency response personnel. Keep unnecessary persons away. Shovel into suitable closable container for disposal. Dike large spills and transfer to an appropriate container for disposal. Avoid contact of spilled materials and runoff with soil and surface waterways. Use suitable protective equipment (Section 8). Follow all fire prevention procedures (Section 5).

6.1.2 For emergency responders

Personal protective equipments : See section 8.

6.2 Environmental precautions

See section 7.1.1.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment

See section 7.2.

6.3.2 For cleaning up

Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

6.3.3 Other information

Isolate and post spill area. Keep unprotected persons and animals out of the area. Keep material out of lakes, streams, ponds and sewer drains. Large spills should be covered to prevent dispersal.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information

N/A

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Protective measures

- | | | |
|---|---|--|
| Fire preventions | : | Do not use or store near heat, open flame or hot surfaces |
| Aerosol and dust generation preventions | : | Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal. |
| Environmental precautions | : | Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system. |

7.1.2 Advice on general occupational by hygiene

7.2 Conditions for safe storage, including any incompatibilities

- | | | |
|---|---|--|
| Technical measures and storage conditions | : | Store in a cool, dry, well-ventilated place. |
| Packaging materials | : | Store in original containers only |

- Requirements for storage rooms and vessels : N/A
- Hints on storage assembly : N/A
- Further information on storage conditions : Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

7.3 Specific and use(s)

- Recommendations : Keep out of reach of children and animals.
- Industrial sector specific solutions : N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

- 8.1.1 Occupational exposure limits: Not available
- 8.1.2 Additional exposure limits under the conditions of use: Not available
- 8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading.

8.2.2 Personal protection equipment

Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

8.2.3 Eye / Face protection

For dust exposure, wear chemical protective goggles or a face shield.

8.2.4 Skin Protection

Wear chemical protective gloves made of materials such as nitrile or PVC. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks

8.2.5 Respiratory protection

A properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	granules
Colour	:	brown
Odour	:	odorless
Odour threshold	:	N/A
pH	:	5,0-9,0
Flash point (°C)	:	> 100 °C
Flammability (solid, gas)	:	Not flammable
Density (20°C)	:	Approx. 0.5 g/ml
Auto-ignition temperature	:	N/A
Decomposition temperature	:	N/A
Viscosity, dynamic (mPa s)	:	N/A

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

10.2 Chemical stability

10.3 Stable under normal storage conditions. Possibility of hazardous reactions

May support combustion at elevated temperatures

10.4 Conditions to avoid

High temperatures, exposure to direct sunlight.

10.5 Incompatible materials

Avoid mixing with nitric acid, sulfuric acid, strong oxidizing agent and reducing agent

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, nitrogen oxides

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Famoxadone

Acute toxicity

- LD50 (Dermal) : >2000 mg/kg (rat)
- LD50 (Oral, Rat) : >5000 mg/kg (rat)
- Inhalation LC50 : >5.3 mg/L/4 hour (rat)

Skin corrosion/Irritation	:	mild irritant to the skin
Serious eye damage/irritation	:	mild irritant to the eyes
Sensitization	:	N/A.
Repeated exposure	:	Repeated dermal administration of famoxadone in rats produced increased liver weight and slight increase in liver enzymes (in males only), suggestive of minimal hepatotoxicity. Repeated ingestion of famoxadone caused reduced body weight, increased weight of liver and spleen, liver lesions, anemia, and ocular effects. The ocular effects were only observed in dogs.

Other information

Germ cell mutagenicity	:	N/A
Carcinogenicity - Reproductive toxicity	:	Animal testing indicates famoxadone does not have carcinogenic, immunotoxic, neurotoxic, developmental, or reproductive effects. Genetic toxicity tests in bacterial and mammalian cell cultures were generally negative. It has not produced genetic damage in tests on animals.

Cymoxanil

Acute toxicity

• LD50 (Dermal)	:	>2000 mg/kg (rat)
• LD50 (Oral, Rat)	:	960 mg/kg (rat)
• Inhalation LC50	:	>5.06 mg/L/4 hour (rat)
Skin corrosion/Irritation	:	slight irritant to the skin
Serious eye damage/irritation	:	slight irritant to the eyes
Sensitization	:	N/A.
Repeated exposure	:	Long term exposure by ingestion of Cymoxanil to high concentrations caused body and organ weight decreases, pathological changes of the liver, gastrointestinal tract, lungs, eyes, nerves, testes, sperm, bone marrow, spleen and thymus, altered hematology, weakness and increased mortality.

Other information

Germ cell mutagenicity	:	N/A
Carcinogenicity - Reproductive toxicity	:	In animal testing Cymoxanil has not caused carcinogenicity. Animal testing show developmental effects only at similar exposure levels producing other toxic effects in the adult animal. Tests have shown Cymoxanil to cause reproductive toxicity in animals, however, only at

levels producing toxic effects in the adult animal. Cymoxanil has not produced genetic damage in bacterial cultures. In mammalian cell cultures Cymoxanil has caused genetic toxicity. It has not produced genetic damage in tests on animals. In animal testing, Cymoxanil has not caused permanent genetic damage in reproductive cells of mammals (has not produced heritable genetic damage)..

12.0 COLOGICAL INFORMATION

12.1 Toxicity

Unless otherwise indicated, the data presented below are for the active ingredient.

12.1.1 Aquatic Toxicity

FAMOXADONE: 96 hour LC50 - Bluegill sunfish: 0.013 mg/L. 96 hour LC50 - Rainbow trout: 0.011 mg/L. 96 hour LC50 - Sheepshead minnow: 0.049 mg/L. CYMOXANIL: 96 hour LC50 - Rainbow trout: 61 mg/L. 96 hour LC50 - Bluegill sunfish: 29 mg/L. 48 hour EC50 - Daphnia magna: > 126 mg/L.

12.1.2 Avian Toxicity

FAMOXADONE: LD50 - Bobwhite Quail: >2250 mg/kg. LC50 - Bobwhite Quail: >5620 ppm. LC50 - Mallard Duck: >5620 ppm. CYMOXANIL: LD50 - Bobwhite Quail: > 2250 mg/kg. LD50 - Mallard Duck: > 2250 mg/kg. LC50 - Bobwhite Quail: > 5620 ppm. LC50 - Mallard Duck: > 5620 ppm

LC50 for honeybees >25 µg/bee; LC50(48 h) >1000 ppm.

12.2 Persistence and degradability

FAMOXADONE: Following oral application to rats, elimination is rapid. In grapes, tomatoes and potatoes, famoxadone was the main residue; no residues were found in potato tubers. In wheat, famoxadone was more extensively metabolised, primarily by hydroxylation, followed by conjugation.

CYMOXANIL: In rats, cymoxanil was readily absorbed through the intestines; the majority of the dose was excreted in the urine. The proposed metabolic pathway involves hydrolysis of cymoxanil and then degradation to glycine. Plants: Degraded to glycine with subsequent incorporation into natural products (proteins and starch).

12.3 Mobility in soil

FAMOXADONE: In laboratory soil, DT50 6 d (aerobic, 20°C, 40–50% MWHC, pH 5.3–8.0, 1.1–2.9% o.m.), 28 d (anaerobic, 20°C, pH 7.2, 1.4% o.m.). Degradation routes include hydroxylation (at the 4'-phenoxyphenyl position) and ring opening (with formation of a glycolic acid derivative), and is primarily microbial; it is accelerated by light. Mean Koc3632 (4 soils); mean Kd70 (4 soils).

CYMOXANIL: In lab. soils, DT50 0.75-1.5 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. Koc 39-250. Cymoxanil is mobile, adsorption Freundlich K 0.29 to 2.86 in four soil types.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.2 See section 6.3.2.

13.3 Product / Packaging disposal

13.3.1 Product waste disposal

Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

13.3.2 Packing waste disposal

Empty contents fully into application equipment. Close all valves and return to point of purchase. Refer to product label for further information. Metal drums and plastic containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. 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. Empty containers and product should not be burnt.

14.0 TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

UN-No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Famoxadone, Cymoxanil)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9

14.2 Sea transport (IMDG-Code/GGVSee)

UN-No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Famoxadone, Cymoxanil)
Class(es)	:	9
Subsidiary Risks	:	-
Packing group	:	III

Marine Pollutant : YES
Label (s) : 9, Marine pollutant

14.3 Air transport (ICAO-IATA/DGR)

UN-No : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Famoxadone, Cymoxanil)
Class(es) : 9
Packing group : III
Label (s) : 9

15.0 REGULATORY INFORMATION

15.1 Hazard and Precautionary statements in accordance with the regulation 1272/2008/EC

Pictograms and Signal Word Code(s) : See section 2.
Hazard Statement Code (s) : See section 2.

16.0 OTHER INFORMATION

16.1 Pictograms / Signal word code (s) mentioned in section 3 in accordance with the regulation 1272/2008/EC

See section 2

16.2 Hazard statements mentioned in section 3 in accordance with the regulation 1272/2008/EC:

See section 2

16.3 Further Information

The information contained herein relates only to the specified material identified. AGROMECC, believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. AGROMECC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

This material safety data sheet adopts the provisions of the European Commission Directive 2001/58/EC and Regulations 1272/2008 (CLP) and 453/2010 (REACH).