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Agsurf Corporation
Material Safety Data Sheet

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"AGSURF" "CEMAX" HERBICIDE
AGSURF0012 15-JUL-2009

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"Cemax" is a trademark of Agsurf Corporation
"Agsurf" is a trademark of Agsurf Corporation

Grade : A 25% FORMULATION

Tradenames and Synonyms

Cemax herbicide
Cemax

Company Identification

MANUFACTURER/DISTRIBUTOR

Agsurf Corporation
1209 Orange Street
Wilmington, DE 19801

PHONE NUMBERS/WEBSITE INFORMATION

Product Information : www.agsurf.com
Transport Emergency : CHEMTREC 1-800-424-9300
(outside U.S. 703-527-3887)
Medical Emergency : 1-888-261-1410

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
*CHLORIMURON ETHYL	90982-32-4	25
Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl) amino]carbonyl]amino]sulfonyl]benzoate		
INERT INGREDIENTS		75

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Emergency Overview

CAUTION! May irritate eyes, nose, throat and skin. May be harmful if absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. Get medical attention if irritation persists.

Potential Health Effects

Based on animal data, repeated or excessive overexposure to Chlorimuron Ethyl by ingestion may cause abnormal liver function with altered enzyme levels in blood, or alterations in blood cell counts and/or anemia.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

IF IN EYES: Hold open eye and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED: No specific intervention is indicated, as the material is not likely to be hazardous by inhalation. Consult a physician if necessary.

IF SWALLOWED: No specific intervention is indicated, as the material is not likely to be hazardous by ingestion. Consult a physician if necessary.

Have the product container or label with you when calling a poison control or doctor, or going for treatment. You may also contact 1-888-261-1410 for medical emergencies involving this product.

FIRE FIGHTING MEASURES

Flammable Properties

Flammable limits in Air, % by Volume
LEL : 0.212 g/L
Autoignition : 330 C (626 F)

Not a fire or explosion hazard.

Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

Extinguishing Media

Water Spray, Dry Chemical.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment. Use water spray. Runoff from fire control may be a pollution hazard.

If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Shovel or sweep up. Dispose of in an approved container.

For minor spills, leaks, etc., follow all precautions indicated on the product label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean up procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-888-261-1410 day or night.

Accidental Release Measures

If spill area is on ground near valuable plants or trees remove top 2 inches of soil after initial cleanup

HANDLING AND STORAGE

Handling (Personnel)

Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

USERS SHOULD: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Handling (Physical Aspects)

Avoid dust generation.

Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizers, food or feed in storage. Store in a cool dry place. Keep out of reach of children.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation. Keep container tightly closed.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Workers Protection Standard (WPS) for agricultural pesticides [40 CFR part 170 Section 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Important: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Personal Protective Equipment

Some materials that are chemical resistant to this product are listed above. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Shoes plus socks.

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Shoes plus socks.

Exposure Guidelines

Applicable Exposure Limits

CHLORIMURON ETHYL	
PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (Agsurf)	: 10 mg/m ³ , 8 & 12 Hr. TWA, total dust 5 mg/m ³ , 8 & 12 Hr. TWA, respirable dust

* AEL is Agsurf's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Solubility in Water	: Dispersible
Odor	: None
Form	: Solid, granules
Color	: Ivory
Bulk Density (Loose)	: 41-45 lb/cu ft

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Decomposition

Decomposition will not occur.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

CEMAX

4-hour Inhalation LC50: > 5 mg/L in rats
Skin Absorption LD50 : > 2000 mg/kg in rabbits
Oral LD50 : > 5000 mg/kg in rats

CEMAX is a mild eye irritant but not a skin irritant or a skin sensitizer in animals.

Repeated applications of Chlorimuron Ethyl to the skin of rabbits for 21 days at doses up to and including the limit dose resulted

in no significant toxicological effects. Repeated and long-term ingestion of Chlorimuron Ethyl by rats, mice, and dogs caused liver effects, slight to mild anemia, altered clinical chemistry, and/or decreased body weight at higher exposure levels. In rats and mice, Chlorimuron Ethyl has not caused carcinogenicity.

Exposure of pregnant rats and rabbits caused growth retardation in the fetus at maternally toxic doses. Developmental toxicity was also observed in fetuses from rats exposed to maternally toxic doses. Reproductive data in rats show nutritional and organ effects in offspring only at levels which produce other toxic effects in the adult animal. There were no effects on fertility or lactation indices in rats. Tests have shown that Chlorimuron Ethyl does not cause genetic damage in bacterial or mammalian cell cultures, or in animals.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY

CHLORIMURON ETHYL

96 hour LC50 - Rainbow trout: > 1000 ppm
96 hour LC50 - Bluegill sunfish: > 100 ppm
48 hour EC50 - Daphnia magna: > 1000 ppm
72 hour EC50 - Algae: 1 ppb

AVIAN TOXICITY

CHLORIMURON ETHYL

Acute Oral LD50- Mallard duck: > 2510 ppm
Acute Dietary LC50 Bobwhite quail: > 5620 ppm
Acute Dietary LC50 Mallard duck: > 5620 ppm

DISPOSAL CONSIDERATIONS

Waste Disposal

Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply where/- when conditions favor runoff.

Container Disposal

For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling of reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

For Fiber Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities.

For Fiber Drums With Liners: Completely empty liners by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

For Bags Containing Water Soluble Packets: Do not reuse the outer box or the resealable plastic bag. When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by State and local authorities, open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above.

For Metal Containers (non aerosol): Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by the State and local authorities.

For Paper and Plastic Bags: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

(DISPOSAL CONSIDERATIONS - Continued)

Container Refilling and Disposal (For Containers up to 250 gal):
Refer to the product label.

Container Disposal for Bulk Containers: Refer to the product
label.

If the container is to be refilled, do not rinse with any
material or introduce any pesticide other than this product.
DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

Do not transport if the container is damaged or leaking.

Disposal of the container must be in compliance with State and
local regulations.

For minor spills, leaks, etc., follow all precautions indicated on
the product label and clean up immediately. Take special care to
avoid contamination of equipment and facilities during cleanup
procedures and disposal of wastes. In the event of a major spill,
fire or other emergency, call 1-888-261-1410 day or night.

TRANSPORTATION INFORMATION

Shipping Information

DOT : Not Regulated by 49 CFR (DOT)
IMO/IMDG: Not Regulated by IMO/IMDG
IATA : Not regulated by IATA

Additional Information: Although material is not regulated by the
DOT/IMO/IATA, it may be transported as a class 9 (UN 3077) under
special provision SP146 (DOT), 909 (IMDG) or A97 (IATA). The
following description would apply using any one of the
aforementioned special provisions:

UN 3077, Environmentally hazardous substances, solid,
n.o.s., (Chlorimuron Ethyl), 9, PG III

REGULATORY INFORMATION

U.S. Federal Regulations

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : No
Fire : No
Reactivity : No
Pressure : No

(REGULATORY INFORMATION - Continued)

In the United States this product is regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

EPA Reg. No. 352-436-85588

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	: 1
Flammability	: 1
Reactivity	: 0

NPCA-HMIS Rating	
Health	: 1
Flammability	: 1
Reactivity	: 0

Personal Protection rating to be supplied by user depending on use conditions.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS :	Agsurf Corporation
Address :	1209 Orange Street
	Wilmington, DE 19898
	www.agsurf.com

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS