

Product Name: EAGLE (TM) 20EW Fungicide

Issue Date: 04/30/2014

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Dow AgroSciences LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name
EAGLE (TM) 20EW Fungicide

COMPANY IDENTIFICATION

Dow AgroSciences LLC
A Subsidiary of The Dow Chemical Company
9330 Zionsville Road
Indianapolis, IN 46268-1189
United States

Customer Information Number: 800-992-5994
info@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-992-5994
Local Emergency Contact: 352-323-3500

2. Hazards Identification

Emergency Overview

Color: White

Physical State: Liquid.

Odor: Aromatic

Hazards of product:

CAUTION! May cause eye irritation. May be harmful if inhaled. May cause central nervous system effects. May cause anesthetic effects. May cause respiratory tract irritation. Isolate area. Keep upwind of spill. Stay out of low areas. Toxic fumes may be released in fire situations. Possible cancer hazard. May cause cancer based on animal data.

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. In humans, eye irritation resulted from brief (minutes) exposure to cyclohexanone vapor concentration of 50 ppm and above.

Skin Contact: Brief contact may cause slight skin irritation with local redness.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: Prolonged excessive exposure to mist may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause central nervous system effects. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. Signs and symptoms of excessive exposure may include: Sweating. Nausea and/or vomiting.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Excessive exposure may cause neurologic signs and symptoms. Observations in animals include: Convulsions. Muscle spasms or twitches.

Aspiration hazard: Based on physical properties, not likely to be an aspiration hazard.

Effects of Repeated Exposure: For the active ingredient(s): In animals, effects have been reported on the following organs: Liver. Testes. Adrenal gland. Kidney. Thyroid. Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney. Liver. Central nervous system. Blood. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Cancer Information: Contains naphthalene which has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.

Birth Defects/Developmental Effects: For the active ingredient(s): Has been toxic to the fetus in lab animals at doses nontoxic to the mother. For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Has caused birth defects in lab animals only at doses producing severe toxicity in the mother.

Reproductive Effects: For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. For the minor component(s): Cyclohexanone caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals.

3. Composition Information

Component	CAS #	Amount
Myclobutanil	88671-89-0	19.7 %
Heavy aromatic naphtha	64742-94-5	25.0 %
Cyclohexanone	108-94-1	10.0 %
Propylene glycol	57-55-6	6.0 %
Solvent naphtha (petroleum), light aromatic	64742-95-6	1.0 %
Naphthalene	91-20-3	0.2 %
Balance	Not available	38.1 %

4. First-aid measures**Description of first aid measures**

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: 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). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.

Skin Contact: 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. Suitable emergency safety shower facility should be available in work area.

Eye Contact: 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. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

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.

Indication of immediate medical attention and special treatment needed

Maintain adequate ventilation and oxygenation of the patient. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Probable mucosal damage may contraindicate the use of gastric lavage. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Repeated excessive exposure may aggravate preexisting lung disease.

5. Fire Fighting Measures

Suitable extinguishing media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen cyanide. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Fire Fighting Procedures: 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. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. 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 (M)SDS.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting 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.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Keep upwind of spill. Ventilate area of leak or spill. 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.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance.

7. Handling and Storage

Handling

General Handling: Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed.

Storage

Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

8. Exposure Controls / Personal Protection

Exposure Limits

Component	List	Type	Value
Myclobutanil	Dow IHG	TWA	0.5 mg/m ³
Cyclohexanone	ACGIH	TWA	20 ppm SKIN
	ACGIH	STEL	50 ppm SKIN
	OSHA Table Z-1	PEL	200 mg/m ³ 50 ppm
	Dow IHG	TWA	7.5 ppm SKIN
Propylene glycol	WEEL	TWA	10 mg/m ³
		Aerosol.	
Naphthalene	ACGIH	TWA	10 ppm SKIN
	OSHA Table Z-1	PEL	50 mg/m ³ 10 ppm

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact.

It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

Personal Protection

Eye/Face Protection: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. 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.

Respiratory Protection: 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, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Appearance

Physical State	Liquid.
Color	White
Odor	Aromatic
Odor Threshold	No test data available
pH	8.5 (@ 100 %) <i>pH Electrode (neat)</i>
Melting Point	Not applicable
Freezing Point	No test data available
Boiling Point (760 mmHg)	100 °C (212 °F) Same as water.
Flash Point - Closed Cup	95 °C (203 °F) (solvent)
Flammable Limits In Air	Lower: No test data available Upper: No test data available
Vapor Pressure	> 266.6 hPa Solvent
Vapor Density (air = 1)	5.2 Solvent
Specific Gravity (H₂O = 1)	1.03 <i>Unspecified</i>
Solubility in water (by weight)	Disperses in water
Partition coefficient, n-octanol/water (log Pow)	No data available for this product. See Section 12 for individual component data.
Autoignition Temperature	484 °C (903 °F) (solvent)
Decomposition Temperature	No test data available
Dynamic Viscosity	500 - 1,000 cps <i>Calculated</i> similar to water
Kinematic Viscosity	No test data available
Liquid Density	1.03 g/cm ³ <i>Calculated</i>

10. Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions

Polymerization will not occur.

Conditions to Avoid: Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Avoid contact with: Strong oxidizers.

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen chloride. Hydrogen cyanide. Nitrogen oxides. Toxic gases are released during decomposition.

11. Toxicological Information

Acute Toxicity

Ingestion

As product: LD50, rat, female 3,749 mg/kg

Dermal

LD50, rat > 2,000 mg/kg

No deaths occurred at this concentration.

Inhalation

As product: The LC50 has not been determined. Based on information for component(s): Estimated.

LC50, Aerosol, rat > 5 mg/l

Eye damage/eye irritation

May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. In humans, eye irritation resulted from brief (minutes) exposure to cyclohexanone vapor concentration of 50 ppm and above.

Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

Sensitization

Skin

Did not cause allergic skin reactions when tested in guinea pigs.

Respiratory

No relevant data found.

Repeated Dose Toxicity

For the active ingredient(s): In animals, effects have been reported on the following organs: Liver. Testes. Adrenal gland. Kidney. Thyroid. Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney. Liver. Central nervous system. Blood. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Chronic Toxicity and Carcinogenicity

Active ingredient did not cause cancer in laboratory animals. Contains naphthalene which has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.

Carcinogenicity Classifications:

Component	List	Classification
Cyclohexanone	ACGIH	Confirmed animal carcinogen with unknown relevance to humans.; Group A3
Naphthalene	IARC NTP	Possibly carcinogenic to humans.; 2B Anticipated carcinogen.

Developmental Toxicity

For the active ingredient(s): Has been toxic to the fetus in lab animals at doses nontoxic to the mother. Did not cause birth defects in laboratory animals. For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Has caused birth defects in lab animals only at doses producing severe toxicity in the mother.

Reproductive Toxicity

For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. For the minor component(s): Cyclohexanone caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals.

Genetic Toxicology

For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative. For the minor component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were inconclusive

12. Ecological Information

Toxicity

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity

LC50, *Oncorhynchus mykiss* (rainbow trout), 96 h: 10.3 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, *Daphnia magna* (Water flea), static test, 48 h, immobilization: 7.1 mg/l

Aquatic Plant Toxicity

EbC50, *Pseudokirchneriella subcapitata* (green algae), static test, biomass growth inhibition, 96 h: 8.6 mg/l

Toxicity to Micro-organisms

EC50; activated sludge: 71 mg/l

Toxicity to Above Ground Organisms

contact LD50, *Apis mellifera* (bees): > 200 ug/bee

oral LD50, *Apis mellifera* (bees): > 171 ug/bee

Persistence and DegradabilityData for Component: Myclobutanil

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Stability in Water (1/2-life):

> 365 d

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
22.4 %	28 d	OECD 301D Test	fail

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.69E-11 cm ³ /s	7.6 h	Measured

Data for Component: Heavy aromatic naphtha

Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

Data for Component: Cyclohexanone

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
87 %	14 d	OECD 301C Test	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.21E-11 cm ³ /s	10.6 h	Estimated.

Theoretical Oxygen Demand: 2.61 mg/g

Data for Component: Propylene glycol

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
81 %	28 d	OECD 301F Test	pass
96 %	64 d	OECD 306 Test	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.28E-11 cm ³ /s	10 h	Estimated.

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
69.0 %	70.0 %	86.0 %	

Chemical Oxygen Demand: 1.53 mg/mg

Theoretical Oxygen Demand: 1.68 mg/mg

Data for Component: Solvent naphtha (petroleum), light aromatic

For the major component(s): Biodegradation under aerobic static laboratory conditions is high (BOD₂₀ or BOD₂₈/ThOD > 40%). For some component(s): Biodegradation under aerobic static laboratory conditions is low (BOD₂₀ or BOD₂₈/ThOD between 2.5 and 10%).

Data for Component: Naphthalene

Material is expected to be readily biodegradable.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
99.9 %	15.2 d	Other guidelines	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
2.16E-11 cm ³ /s	5.9 h	Estimated.

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
57.000 %	71.000 %	71.000 %	

Theoretical Oxygen Demand: 3.00 mg/mg

Bioaccumulative potential**Data for Component: Myclobutanil**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 3.17 Measured

Bioconcentration Factor (BCF): 8.3; Oncorhynchus mykiss (rainbow trout)

Data for Component: Heavy aromatic naphtha

Bioaccumulation: For similar material(s): Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Data for Component: Cyclohexanone

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 0.81 Measured

Data for Component: **Propylene glycol**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient, n-octanol/water (log Pow): -1.07 Measured
Bioconcentration Factor (BCF): 0.09; Estimated.

Data for Component: **Solvent naphtha (petroleum), light aromatic**

Bioaccumulation: For the major component(s): Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). For the minor component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Data for Component: **Naphthalene**

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient, n-octanol/water (log Pow): 3.3 Measured
Bioconcentration Factor (BCF): 40 - 300; Fish; Measured

Mobility in soil

Data for Component: **Myclobutanil**

Mobility in soil: Potential for mobility in soil is low (Koc between 500 and 2000)., Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Partition coefficient, soil organic carbon/water (Koc): 517
Henry's Law Constant (H): 4.33E-04 Pa*m3/mole. Measured

Data for Component: **Heavy aromatic naphtha**

Mobility in soil: No relevant data found.

Data for Component: **Cyclohexanone**

Mobility in soil: Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient, soil organic carbon/water (Koc): 15 Estimated.
Henry's Law Constant (H): 1.04E-05 atm*m3/mole Measured

Data for Component: **Propylene glycol**

Mobility in soil: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process., Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient, soil organic carbon/water (Koc): < 1 Estimated.
Henry's Law Constant (H): 1.2E-08 atm*m3/mole Measured

Data for Component: **Solvent naphtha (petroleum), light aromatic**

Mobility in soil: For the major component(s):, Potential for mobility in soil is low (Koc between 500 and 2000).

Data for Component: **Naphthalene**

Mobility in soil: Potential for mobility in soil is medium (Koc between 150 and 500).
Partition coefficient, soil organic carbon/water (Koc): 240 - 1,300 Measured
Henry's Law Constant (H): 2.92E-04 - 5.53E-04 atm*m3/mole; 25 °C Measured
Distribution in Environment: Mackay Level 1 Fugacity Model:

Air	Water.	Biota	Soil	Sediment
74 %	8.5 %	< 0.01 %	18 %	0.39 %

13. Disposal Considerations

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.

14. Transport Information

DOT Non-Bulk
NOT REGULATED

DOT Bulk

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: CYCLOHEXANONE, NAPHTHALENE
Hazard Class: 9 **ID Number:** UN3082 **Packing Group:** PG III

IMDG

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: Myclobutanil
Hazard Class: 9 **ID Number:** UN3082 **Packing Group:** PG III
Marine pollutant: Yes

ICAO/IATA

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: Myclobutanil
Hazard Class: 9 **ID Number:** UN 3082 **Packing Group:** PG III
Cargo Packing Instruction: 964
Passenger Packing Instruction: 964
Additional Information

Reportable quantity: 50,000 lb – CYCLOHEXANONE, 50,000 lb – NAPHTHALENE

MARINE POLLUTANT

Myclobutanil

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS #	Amount
Myclobutanil	88671-89-0	19.7%
Naphthalene	91-20-3	0.2%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
Heavy aromatic naphtha	64742-94-5	25.0%
Cyclohexanone	108-94-1	10.0%
Propylene glycol	57-55-6	6.0%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Toxic Substances Control Act (TSCA)

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

16. Other Information

Hazard Rating System

NFPA	Health	Fire	Reactivity
	2	1	0

Revision

Identification Number: 67588 / 1016 / Issue Date 04/30/2014 / Version: 5.0

DAS Code: GF-1062

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

Dow AgroSciences LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is

provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.