



Safety Data Sheet

Report Date 08-Jan-16

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1. Identification

Product Name : OMNI BRAND CLETHODIM 2 EC
Synonyms : None
Product Use : Clethodim, sulfonyl urea herbicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Danger
Skin Irritation : Causes mild skin irritation
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 >2,000 mg/kg (female rat)
Acute Toxicity Dermal : LD50 >2,000 mg/kg (rabbit)

Hazard Categories : Oral/Dermal/Inhalation-5/5/5; Eye/Skin-2B/3; STOT,Single-3; Aspiration-1;Flammable-3; Carcinogen-2

Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes eye irritation
Causes mild skin irritation
May be harmful if inhaled
May cause respiratory irritation
Suspected of causing cancer
May be fatal if swallowed and enters airways
Flammable liquid and vapour

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
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Clethodim	99129-21-2	26.4
Calcium dodecylbenzenesulfonate	26264-06-2	<3.0
Aromatic Hydrocarbon solvent naphtha (petroleum), Heavy aromatic (contains: Naphthalene, CAS 91-2-3, 5% to 10%; 1,2,4-Trimethylbenzene, CAS No 95-63-6, 1% to 5%)	64742-94-5	<70.0
Other ingredients deemed not to be hazardous	Proprietary	Balance

4. First Aid Measures

- Eye** : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical advice/attention.
- Skin** : Take off contaminated clothing and wash before reuse. Rinse skin immediately with plenty of water for 15 to 20 minutes. Get medical advice/attention.
- Inhalation** : Move person to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
- Ingestion** : Call a poison control center or doctor immediately for treatment advice. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage.

5. Fire Fighting Measures

- Extinguishing Media** : Use water fog, foam, dry chemical or carbon dioxide (CO₂).
- Specific Hazards Arising from the Chemical** : Liquid evaporates and forms vapors/fumes which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment. Contain and isolate runoff and debris for proper disposal.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Half face filter respirator. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Clean up spills immediately.



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Methods and Materials for Containment and Cleanup : Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposal container.

7. Handling and Storage

Precautions for Safe Handling : Use only outdoors or in a well-ventilated area. Avoid release to the environment. Keep away from flames and hot surfaces. No smoking. Use PPE as required. Avoid skin and eye contact and inhalation of vapors. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Ground/bond container and receiving equipment. Use explosion proof electrical/ventilation/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Conditions for Safe Storage : Store locked up. Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials. Store away from sources of heat or ignition. Keep containers tightly closed when not in use. Check regularly for leaks.

8. Exposure Controls / Personal Protection

TLV/PEL : Naphthalene (TWA)=10 ppm. 1,2,4-Trimethylbenzene (TWA)=25 ppm.

Appropriate Engineering Controls : Handle only with adequate ventilation.

Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Half face filter respirator. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : Light yellow liquid with aromatic odor.

Flash Point, °F : 52.8 Deg. C. (127 Deg. F.)

Boiling Point, °F : No data available

Melting Point(Freezing point), °C : Not applicable

Vapor Pressure, mm Hg @ 20 °C : No data available

Vapor Density : No data available

Solubility in Water : Emulsifies in water

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 0.96 (+/- 0.02)

Evaporation Rate(Butyl Acetate = 1) : No data available

Octanol/Water Partition Coefficient : Not applicable

pH : 3.0 to 6.0



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Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : Not determined
Decomposition temperature : No data available

10. Stability and Reactivity

Reactivity : No information found
Chemical Stability : Stable
Hazardous Decomposition Products : Oxides of carbon and nitrogen, smoke and other toxic fumes.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Thermally unstable. Avoid elevated temperatures and sources of ignition.
Incompatible Materials : Oxidizing agents.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >2,000 mg/kg (female rat). May be harmful if swallowed. May be fatal if swallowed and enters airways.
Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rabbit). May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : >2.0 mg/L/4 hour. May be harmful if inhaled. May cause respiratory irritation.
Likely Routes of Exposure : Eyes, skin, inhalation
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes eye irritation.
Skin Sensitization : Not a sensitizer
Carcinogenic : Naphthalene=possibly carcinogenic to humans (IARC, Group 2B).
Chronic Effects : Individuals with pre-existing diseases of the liver, red blood cells and central nervous system may have increased susceptibility to the toxicity of excessive exposures.
Other Hazards : STOT-Single Exposure: May cause respiratory irritation. May cause drowsiness and dizziness. CA Prop 65 Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

12. Ecological Information

Ecotoxicity : Avoid contamination of any water supply with chemical or empty container. Very low toxicity to birds. Slightly toxic to freshwater fish. Practically nontoxic to daphnia. Nontoxic to adult worker bees.
Persistence and Degradability : Clethodim is of low persistence in most soils with half life of 3 days. Breakdown is mainly by aerobic processes and photolysis is accepted as making a contribution to breakdown.
Bioaccumulative Potential : Not bioaccumulative (clethodim).



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- Mobility in Soil** : Clethodim is soluble in water and can be expected to adhere poorly to all soil types. High hazard of moving off application site with rain or irrigation water.
- Other Adverse Effects** : In animals, clethodim metabolizes to the sulphoxide and sulfone. In plants, clethodim metabolizes to the sulphoxide, sulfone and S(methyl sulfoxide).

13. Disposal Considerations

- Waste Disposal Method** : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act. (D001-ignitable)

14. Transport Information

- UN Proper Shipping Name** : Not regulated by DOT in non-bulk packaging.
- Transport Hazard Class** : None
- UN Identification Number** : None
- Packaging Group** : None
- Environmental Hazards** : Reportable Quantities: Naphthalene=100 lbs; Calcium dodecylbenzenesulfonate=1,000 lbs.
- Transport in Bulk** : If shipped in single package >119 gallons, ship as: RQ, NA1993, Combustible Liquid, n.o.s., (Aromatic Hydrocarbon Solvent, Naphthalene), PG III "ERG # 128"
- Special Precautions for Transportation** : If shipped by air (IATA) or vessel (IMDG) in any size packaging, ship as UN1993, Flammable Liquid, n.o.s., (Aromatic Hydrocarbon Solvent), 3, PG III
- Freight Classification** : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

- National Fire Protection Association Rating** :
- | | | | |
|--|---|---------|---------------|
| Health: | 2 | Fire: 2 | Reactivity: 0 |
| Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum) | | | |
- S.A.R.A Title III Hazard Classification (Yes/No)** :
- Immediate(Acute) Health: Y
- Delayed (Chronic) Health: Y
- Sudden Release of N Pressure: Y
- Fire: Y
- Reactive: N
- FIFRA Information** : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:
- EPA Registration Number** : 38167-39-5905
- FIFRA Signal Word** : Warning



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- FIFRA Label Statement** : Keep out of reach of children.
- FIFRA Label Statement** : Causes substantial but temporary eye irritation.
- FIFRA Label Statement** : Avoid contact with skin. Do not get in eyes, on skin or on clothing.
- FIFRA Label Statement** : Harmful if swallowed or inhaled.
- FIFRA Label Statement** : Avoid breathing vapors or spray mist.
- FIFRA Label Statement** : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
- FIFRA Label Statement** : No additional label statements.

16. Other Information

Data of Preparation/Revision : 08-January-2017