

SECTION 1 - IDENTIFICATION

Product: ONE STEP™

Recommended use of the chemical and restrictions on use:

Uses: Liquid non-selective weed killer.

List of advices against: Not available.

Details of the supplier of the Safety Data Sheet:

Momar, Inc.
1830 Ellsworth Industrial Dr.
Atlanta, Ga. 30318
404-355-4580
800-556-3967
www.momar.com

Emergency Telephone Number (INFOTRAC): North America: 1-800-535-5053
International: 1-352-323-3500

SECTION 2 – HAZARD IDENTIFICATION

Classification:	Flammable Liquid: 4 Eye Damage/Irritation 2A Skin Corrosion/Irritation: 2 Specific Target Organ Toxicity (Repeat Exposure): 2 Carcinogenicity: 1B Aspiration Hazard: 1
Signal Word:	Danger.
Hazard Statements:	Combustible. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure. Causes severe eye irritation. May cause cancer. May be fatal if swallowed and enters airways.
Pictograms:	



Precautionary Statements:

Prevention: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Keep away from flames and hot surfaces -- No smoking.
Wash hands and all exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust /fume/gas/mist/vapors/spray.

Response:

Get medical advice/attention if you feel unwell.

If on skin: Wash with plenty of water/soap.

In case of fire: Use dry chemical, alcohol foam, carbon dioxide to extinguish.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

If exposed or concerned: Get medical advice/attention.

If swallowed: Immediately call a poison center/doctor/hospital.

Storage:

Store locked up.

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

Disposal:

Dispose of contents/container to approved waste disposal plant in accordance with federal, state, and local regulations.

Other Hazards:

None known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percent Weight
Isoctyl ester of 2,4 Dichlorophenxyacetic Acid	1928-43-4	0.5-1.5
Bromacil	314-40-9	0.1-1.0
Aliphatic Hydrocarbons	68476-31-3	60-100
2-Butoxyethanol	111-76-2	10-30
Naphthalene	91-20-3	0-0.25

SECTION 4 – FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15-20 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Remove contact lenses if possible. Get medical attention, if irritation persists.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Wash clothing and shoes before reuse. Get medical attention, if irritation persists.

Inhalation: Remove from exposure. If not breathing, give artificial respiration. If breathing is difficult, get medical attention.

Ingestion: Get medical attention immediately. Do not induce vomiting. If victim is conscious and alert, give large amounts of water. Discontinue water if victim feels like they may vomit. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects:

Acute: Possible eye and skin irritation.

Delayed: Prolonged or excessive contact with skin could cause dermatitis.

Indication of Any Immediate Medical Attention and Special Treatment Needed: None known.

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing Media: Use dry chemical, carbon dioxide, or alcohol foam.

Specific Hazards Arising From the Substance or Product: Water spray may be ineffective. Use water spray to cool fire exposed containers.

Hazardous Combustion Products: Oxides of carbon, sulphur and nitrogen, chlorine gases, fumes.

Protective Equipment and Precautions for Firefighters: Wear a self-contained breathing apparatus in pressure- demand mode, and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Avoid contact with skin and eyes. Wear protective clothing, see Section 8.

Environmental Precautions: Keep out of sewers, drains, and bodies of water. Spills should be diked and absorbed.

Methods and Materials for Containment and Cleaning Up: Absorb in vermiculite, dry sand, or earth, and place in containers. Collect and reclaim or dispose of in sealed containers in a licensed waste facility. Liquid material may be removed with a vacuum truck. Containers with spillage must be properly labeled with correct contents and hazard symbol.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling: Avoid spilling, skin, and eye contact. Wash thoroughly after handling. Use only with adequate ventilation. Use away from ignition sources. For industrial or professional use only. Do not cut or weld empty container. KEEP OUT OF REACH OF CHILDREN.

Conditions for Safe Storage: Store in a cool dry place. Keep out of sunlight and away from ignition sources.

Incompatibilities: Strong oxidizing agents.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits and Recommendations:

Chemical Name	OSHA PEL	ACGIH TLV	Other Exposure Limits
Isoctyl ester of 2,4 Dichlorophenxyacetic Acid	10 mg/m ³	Not established	Not listed.
Bromacil	Not established	10 mg/m ³	Not listed.
Aliphatic Hydrocarbons	Not established	Not established	Not listed.
2-Butoxyethanol	25 ppm (skin)	25 ppm (skin)	Not listed.
Naphthalene	Not established	10 ppm	Not listed.

Engineering Controls:

Normal ventilation.

Personal Protection Measures:**Respiratory Protection:**

Normally not needed, when used with adequate ventilation. If needed, use NIOSH approved mask and filter for organic vapor.

Skin and Body:

Chemical resistant gloves recommended. Chemical resistant apron, as needed.

Eye Protection:

Safety glasses/goggles recommended.

Other Recommendations:

None.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**Appearance and Odor:**

Clear, red liquid with fuel oil odor.

Odor Threshold:

Not determined.

pH:

Not applicable.

Freezing Point:

Not determined.

Boiling Point:

Not determined.

Flash Point:

145°F

Evaporation Rate (BUAC=1):

Slower.

Flammability:

Combustible.

Flammability or Explosion Limits:**Upper:** Not determined. **Lower:** Not determined.**Vapor Pressure:**

Not determined.

Specific Gravity:

0.875

Solubility in Water:

Insoluble.

Solubility in Other Solvents:

Not determined.

Partition Coefficient (n-octanol/water):

Not determined.

Auto-ignition Temperature:

Not determined.

Decomposition Temperature:

Not determined.

Viscosity:

<20 cSt.

Other Information:

VOC content= 90%.

SECTION 10 – STABILITY AND REACTIVITY**Reactivity:**

No dangerous reaction known under conditions of normal use.

Chemical Stability:

Stable under normal temperature conditions and recommended use.

Possible Hazardous Reactions:

Not available.

Conditions to Avoid:

Contact with incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Oxides of carbon, sulphur and nitrogen, chlorine gases, fumes.

SECTION 11 – TOXICOLOGICAL INFORMATION**Routes of Exposure:**

Inhalation	Ingestion	Skin	Eye
		X	X

Physical, Chemical and Toxicological Effects:

Symptoms: Irritation to skin and eyes.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure:

Sensitization: Not a skin sensitizer.

Germ Cell Mutagenicity: Not classified.

Carcinogenicity: Trace amounts of naphthalene may also be present which is listed by NTP, and IARC as a possible human carcinogen.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity: Lungs.

Numerical Measures of Toxicity:

Product: Not determined.

Component:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isoctyl ester of 2,4 Dichlorophenxyacetic Acid	1089.6 mg/kg (rat)	2531.3 mg/kg (rat)	>1.79 mg/L; 24hrs (rat)
Bromacil	2,000 mg/kg (male rat)	>5000 mg/kg (rabbit)	Not available
Aliphatic Hydrocarbons	Not available.	Not available.	Not available.
2-Butoxyethanol	470 mg/L (rat)	220 mg/kg (rabbit)	450 ppm; 4hrs (rat)
Naphthalene	>1100 mg/kg (rat)	>2500 mg/kg (rat)	Not available

SECTION 12 – ECOLOGICAL INFORMATION**Ecotoxicity:**

Chemical Name	Fish LC50	Invertebrate EC50	Algae EC50
Isoctyl ester of 2,4 Dichlorophenxyacetic Acid	0.50 – 1.20 mg/L; 96hrs (Cutthroat Trout)	9.25 mg/L; 48hrs (Water Flea)	Not available
Bromacil	65 mg/L; 96hrs (Rainbow Trout)	121 mg/L; 48hrs (Water Flea)	0.006 mg/L; 5 days (Green algae)
Aliphatic Hydrocarbons	35 mg/L; 96 hrs (Fathead minnows)	Not available.	Not available.
2-Butoxyethanol	220 mg/l; 96 hrs (other fish)	1815 mg/L; 24hrs (Water Flea)	
Naphthalene	1.99 mg/l; 96 hrs (Pimephales promelas)	2.16 mg/l; 48 hrs (Water Flea)	2.96 mg/l; 4 hrs (Green algae)

Persistence and Degradability:

Not available.

Bioaccumulation:

Low potential to bioaccumulate.

Mobility:

Not available.

Other Adverse Effects:

None known.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Disposal of Wastes: Dispose of product in accordance with local, state, and federal regulations.

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other Information:

None.

SECTION 14 – TRANSPORTATION INFORMATION

DOT:

UN Number:

Proper Shipping Name: Compounds, Weed Killing Liquid

Hazard Class:

Packing Group:

SECTION 15 – REGULATORY INFORMATION

US Federal Regulations:

TSCA: All ingredients of this product are listed in the TSCA inventory.

SARA 313: This product contains the following chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and Title 40 CFR 372.

Chemical Name	CAS Number	Percent Weight
Isoctyl ester of 2,4 Dichlorophenxyacetic Acid	1928-43-4	1.09
2-Butoxyethanol	111-76-2	10-20
Naphthalene	91-20-3	0-0.25

EPA FIFRA:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling 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:

CAUTION

Avoid contact with skin, eyes or clothing.
Harmful if absorbed through skin.

US State Regulations:

California: This product contains the following chemical or chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm: Naphthalene (CAS 91-20-3).

SECTION 16 – OTHER INFORMATION

Issue Date: November 20, 1992
Revision Date: September 29, 2015

Health	Flammability	Reactivity	Personal Protection
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