



SAFETY DATA SHEET

Issue Date 02-Dec-2003

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Foremost 5050-ES Weed Zapper

Other Means of Identification

SDS # FM-002

UN/ID No NA1993
Product Code 5050-ES

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Herbicide.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 3

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor



Appearance Dark amber liquid

Physical State Liquid

Odor Characteristic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
 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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 If skin irritation occurs: Get medical advice/attention
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Other Hazards

Toxic to aquatic life with long lasting effects
 Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Petroleum Distillate	68476-34-6	Proprietary
n-Butyl Alcohol	71-36-3	Proprietary
Phenol	108-95-2	Proprietary
Bromacil	314-40-9	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush immediately with copious amounts of water for 15 minutes. If irritation persists, see physician.
Skin Contact	Flush thoroughly with water and cleanse with soap and water. Remove contaminated clothes and wash before reuse. Get medical attention if irritation occurs.
Inhalation	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison center if individual's condition declines or if symptoms persist.
Ingestion	Give 2-4 glasses of water, induce vomiting, pump stomach. See physician immediately.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms Nausea, irritation to eyes, nose and throat. May absorb through skin and cause toxic effects and damage to kidneys, spleen, pancreas and liver.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Foam, carbon dioxide or dry chemical extinguisher.

Unsuitable Extinguishing Media Water jet.

Specific Hazards Arising from the Chemical

Flammable.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental Precautions This product may be toxic to fish; prevent run off to sewers, streams, lakes and other bodies of water.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth).

Methods for Cleaning Up Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Keep out of the reach of children. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not apply directly to or permit this product to come in contact with desirable plants, woody, or herbaceous plants. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Do not breathe vapors or spray mist. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep containers closed when not in use. Apply only as specified on label.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Do not store near fertilizers, seeds, insecticides, or fungicides.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Petroleum Distillate 68476-34-6	TWA: 100 mg/m ³ total hydrocarbons inhalable fraction and vapor, S*	-	-
n-Butyl Alcohol 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³ (vacated) S* (vacated) Ceiling: 50 ppm (vacated) Ceiling: 150 mg/m ³	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m ³ (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m ³ (vacated) S*	IDLH: 250 ppm Ceiling: 15.6 ppm 15 min Ceiling: 60 mg/m ³ 15 min TWA: 5 ppm TWA: 19 mg/m ³
Bromacil 314-40-9	TWA: 10 mg/m ³	(vacated) TWA: 1 ppm (vacated) TWA: 10 mg/m ³	TWA: 1 ppm TWA: 10 mg/m ³

Appropriate Engineering Controls

Engineering Controls Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Goggles or face shield.

Skin and Body Protection Wear protective Neoprene™ gloves, Rubber gloves. An apron or other impermeable body protection is suggested.

Respiratory Protection Solvent type mask.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid	Odor	Characteristic
Appearance	Dark amber liquid	Odor Threshold	Not determined
Color	Dark amber		
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not available		
Boiling Point/Boiling Range	171.11 °C / 340 °F		
Flash Point	54.44 °C / 130 °F		
Evaporation Rate	475	Tag Closed Cup (butyl acetate = 1)	
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	8.0%		
Lower Flammability Limit	0.9%		

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum Distillate 68476-34-6	A3	Group 3		
Phenol 108-95-2		Group 3		
Bromacil 314-40-9	A3			

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum Distillate 68476-34-6		35: 96 h Pimephales promelas mg/L LC50 flow-through		
n-Butyl Alcohol 71-36-3	500: 96 h Desmodemus subspicatus mg/L EC50 500: 72 h Desmodemus subspicatus mg/L EC50	1730 - 1910: 96 h Pimephales promelas mg/L LC50 static 1740: 96 h Pimephales promelas mg/L LC50 flow-through 100000 - 500000: 96 h Lepomis macrochirus µg/L LC50 static 1910000: 96 h Pimephales promelas µg/L LC50 static		1983: 48 h Daphnia magna mg/L EC50 1897 - 2072: 48 h Daphnia magna mg/L EC50 Static
Phenol 108-95-2	46.42: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.0188 - 0.1044: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 187 - 279: 72 h Desmodemus subspicatus mg/L EC50 static	11.9 - 50.5: 96 h Pimephales promelas mg/L LC50 flow-through 20.5 - 25.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Pimephales promelas mg/L LC50 5.449 - 6.789: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 7.5 - 14: 96 h Oncorhynchus mykiss mg/L LC50 static 4.23 - 7.49: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 5.0 - 12.0: 96 h Oncorhynchus mykiss mg/L LC50 13.5: 96 h Lepomis macrochirus mg/L LC50 static 11.9 - 25.3: 96 h Lepomis macrochirus mg/L LC50 flow-through 11.5: 96 h Lepomis macrochirus mg/L LC50 semi-static 34.09 - 47.64: 96 h Poecilia reticulata mg/L LC50 static 31: 96 h Poecilia reticulata mg/L LC50 semi-static 27.8: 96 h Brachydanio rerio mg/L LC50 0.00175: 96 h Cyprinus carpio mg/L LC50 semi-static 33.9 - 43.3: 96 h Oryzias latipes mg/L LC50 flow-through 23.4 - 36.6: 96 h Oryzias latipes mg/L LC50 static	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	4.24 - 10.7: 48 h Daphnia magna mg/L EC50 Static 10.2 - 15.5: 48 h Daphnia magna mg/L EC50

Bromacil 314-40-9		180 - 192: 96 h Pimephales promelas mg/L LC50 flow-through 32: 96 h Lepomis macrochirus mg/L LC50 static 30 - 40: 96 h Oncorhynchus mykiss mg/L LC50 static		
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Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Chemical Name	Partition Coefficient
n-Butyl Alcohol 71-36-3	0.785
Phenol 108-95-2	1.47
Bromacil 314-40-9	2.11

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
n-Butyl Alcohol 71-36-3		Included in waste stream: F039		U031
Phenol 108-95-2	U188	Included in waste streams: F039, K001, K022, K087		U188

Chemical Name	California Hazardous Waste Status
n-Butyl Alcohol 71-36-3	Toxic
Phenol 108-95-2	Toxic Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No NA1993
Proper Shipping Name Combustible liquid, n.o.s.
Hazard Class N/A
Packing Group III
Reportable Quantity (RQ) 5000 lbs

IATA

UN/ID No NA1993
Proper Shipping Name Combustible liquid, n.o.s.
Hazard Class N/A
Packing Group III

IMDG

UN/ID No NA1993
Proper Shipping Name Combustible liquid, n.o.s.
Hazard Class N/A
Packing Group III

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
n-Butyl Alcohol 71-36-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Phenol 108-95-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
n-Butyl Alcohol	71-36-3	Proprietary	1.0
Phenol	108-95-2	Proprietary	1.0
Bromacil	314-40-9	Proprietary	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	X	X	X

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Petroleum Distillate 68476-34-6	X		
n-Butyl Alcohol 71-36-3	X	X	X

Phenol 108-95-2	X	X	X
Bromacil 314-40-9	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	2	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	2	0	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet