



SAFETY DATA SHEET

Revision Date 15-March-2016

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Foremost 5055-ES Knockout Aerosol

UN/ID No UN 1950

Product Code 5055-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

Aspiration Hazard	Category 1
Germ Cell Mutagenicity	Category 2
Skin irritant	Category 2
Eye irritant	Category 2
Specific Target Organ Toxicity (single exposure)	Category 3
Flammable Aerosols	Category 1
Gas under pressure	Liquefied Gas
Carcinogenicity	Category 2
Skin Sensitization	Category 1

Signal Word

Danger

Hazard Statements

Keep out of reach of children.
Read label and SDS before use.
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
May cause allergic skin reaction.
Suspected of causing cancer.
Suspected of causing genetic defects.
May cause respiratory irritation.
Causes serious eye damage and skin irritation.

**Appearance** Clear yellow liquid**Physical State** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

Avoid breathing fumes, mist or spray.
 Use only outdoors or in a well-ventilated area.
 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
 Do not spray on an open flame or other ignition source.
 Pressurized container: Do not pierce or burn, even after use.
 Wash hands thoroughly after handling.
 Wear protective gloves.
 Wear eye or face protection.
 Contaminated work clothing must not be allowed out of the workplace.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink, or smoke when using this product.

Precautionary Statements – Response

If ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs get medical attention. Take off contaminated clothing and wash before reuse.
 IF EXPOSED OR CONCERNED: Get medical advice/ attention.
 Specific treatment (See supplemental first aid instructions on this label).
 IF SWALLOWED: Do not induce vomiting. Call a poison control center or doctor/physician immediately.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor/physician 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. Immediately call a poison center or a physician.

Precautionary Statements - Storage

Store locked up. Keep cool.
 Protect from sunlight, heat, and sparks.
 Store in a well-ventilated place.
 Do not expose to temperatures exceeding 50°C / 122°F.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant in accordance with all local, regional, and national regulations.

Hazards Not Otherwise Classified (HNOC)

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Diesel Fuel #2	68476-34-6	Proprietary
Carbon Dioxide	124-38-9	Proprietary
Naphtha Solvent, Petroleum, Heavy Aromatic	64742-94-5	Proprietary
Diethylene Glycol Ethyl Ether	111-90-0	Proprietary
Isooctyl (2-ethylhexyl) Ester	1928-43-4	Proprietary
Bromacil	314-40-9	Proprietary
Naphthalene	91-20-3	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES

First Aid Measures

General Advice	Danger. Extremely flammable aerosol. Contents under pressure. Harmful or fatal if swallowed. Aspiration hazard if swallowed. Vapor harmful. Keep away from heat and flame. Can cause nervous system depression.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Skin Contact	Wash with plenty of water and soap. If skin irritation occurs get medical attention. Take off contaminated clothing and wash it before reuse.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
Ingestion	Harmful or fatal if swallowed. Seek medical attention immediately. Aspiration hazard – this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, fog, or foam.

Unsuitable Extinguishing Media Not applicable.

Specific Hazards Arising from the Chemical

Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Protective Equipment and Precautions for Firefighters

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive-pressure mode.

Specific fire-fighting methods:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Put on appropriate personal protective equipment (see section 8).
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Methods and Material for Containment and Cleaning Up

Methods for Containment	Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources. Disperse vapors with water spray. Prevent runoff from entering drains, sewers, streams, or other bodies of water.
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Methods for Cleaning Up

Absorb spill with inert material. Absorb unrecoverable product. Transfer contaminated absorbent, soil, and other materials to containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling**Advice on Safe Handling**

Do not get in eyes, on skin, or on clothing. Avoid breathing sprays and vapors. Avoid skin contact. Keep out of reach of children.

Conditions for Safe Storage, Including any Incompatibilities**Storage Conditions**

Do not use or store near heat, sparks, or open flame. Exposure to temperatures above 120°F may cause bursting. Do not puncture or incinerate container. Store in a cool, dry place. Intentional misuse by deliberately concentrating and inhaling may be harmful or fatal. Keep out of reach of children.

Incompatible Materials

None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Diesel Fuel #2 68476-34-6	TWA: 100 mg/m ³ total hydrocarbons inhalable fraction and vapor, S*	-	-
Carbon Dioxide 124-38-9	TWA: 800 ppm	-	-
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**

Good general ventilation required.

Individual Protection Measures, such as Personal Protective Equipment**Eye/Face Protection**

Wear safety goggles or glasses.

Skin and Body Protection

To prevent repeated or prolonged contact, wear impervious gloves (made from rubber, nitrile, or neoprene).

Respiratory Protection

When respiratory protection is required use and organic vapor cartridge. A respiratory program that meets OSHA's 29 CFR 1910.34 & ANSI Z88.2 requirements must be followed.

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
Appearance
Color

Liquid
Clear liquid
Yellow

Odor
Odor Threshold

Solvent
Not determined

Property**Values****Remarks • Method**

pH

Not determined

Melting Point/Freezing Point

Not available

Boiling Point/Boiling Range	Not available	
Flash Point	125 °F - closed cup (liquid portion)	
Evaporation Rate	Not established	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not established	
Vapor Density	Not established	
Specific Gravity	0.80	(1=Water)
Water Solubility	Insoluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames, welding, and other ignition sources. Vapors may ignite at temperatures exceeding flash point.

Incompatible Materials

Acids and strong oxidizers.

Hazardous Decomposition Products

CO, CO₂

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact

May cause serious eye irritation. Symptoms include stinging, tearing, and redness.

Skin Contact

May cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying of the skin, and skin burns.

Inhalation

High vapor/ aerosol concentrations (>1000ppm) are irritating to the eyes and respiratory tract. May cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous effects, including death. May cause peripheral nervous system disorder and/or damage.

Ingestion

Harmful or fatal if swallowed. Aspiration hazard – this material can enter the lungs during swallowing or vomiting and cause lung inflammation and damage.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bromacil 314-40-9	= 641 mg/kg (Rat)	> 2500 mg/kg (Rat) > 5 g/kg (Rabbit)	-

Information on Physical, Chemical and Toxicological Effects

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

Germ Cell Mutagenicity No data available

STOT - Single Exposure Central nervous system, skin.

Chronic Toxicity Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Signs and Symptoms of Overexposure to this material through breathing, swallowing, and/or passage of material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, or unconsciousness).

Aspiration Hazard May be harmful if swallowed and enters airways.

Reproductive Toxicity Suspected genetic cell mutagen.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Diesel Fuel #2 68476-34-6	A3	Group 3		
Naphthalene 91-20-3		Group 2B	Possible Select Carcinogen	
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"

WARNING: This product contains chemicals known to the State of California to cause cancer.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product is toxic to fish and aquatic invertebrates.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Diesel Fuel #2 68476-34-6		35: 96 h Pimephales promelas mg/L LC50 flow-through		
Isooctyl (2-ethylhexyl) Ester 1928-43-4		7.2: 96 h Pimephales promelas mg/L LC50		
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		

Persistence and Degradability

Not determined

Bioaccumulation

Contains components with the potential to bioaccumulate.

Mobility

Chemical Name	Partition Coefficient
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.

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	UN 1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

IATA

UN/ID No	UN 1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

IMDG

UN/ID No	UN 1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

15. REGULATORY INFORMATION**International Inventories**

Not Determined

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - 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****California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act):**

Naphthalene

CERCLA RQ (40 CFR 302):

Naphthalene, 100 lbs.

Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 372.65):

Diethylene Glycol Ethyl Ether

Isooctyl (2-ethylhexyl) Ester

Bromacil

Naphthalene

If identified components of this product are **CERCLA** hazardous substances and/or listed under **Sections 302, 304, or 313 of Title III** of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (also known as EPCRA, the Emergency Planning and Community Right-to-know Act), or under **California Proposition 65** (Safe Drinking Water and Toxic Enforcement Act), they are listed above in Section 15 of this SDS.

If identified components of this product are listed under Section 313, this product contains toxic chemicals subject to the reporting requirements of Section 313. This information must be included in all SDS that are copied and distributed for this material.

Title III Section 311/312 Hazardous Categories – 40 CFR 370.2:

ACUTE (X) CHRONIC (X) FIRE (X) PRESSURE (X) REACTIVE () NOT APPLICABLE ()

T.S.C.A. Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

RCRA Status: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes hazardous waste it would be assigned RCRA Code(s)

D001, D016

FIFRA information

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word: CAUTION. Hazard Statements: Harmful if absorbed through the skin. Harmful if inhaled.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Diesel Fuel #2 68476-34-6	X		
Bromacil 314-40-9	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	4	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	4	0	G

Revision Date 15-March-2016
Revision Note New format

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