

Material Safety Data Sheet

Effective Date: 21-AUG-2009
Product: BRUSH-RHAP, HELENA

I. IDENTIFICATION

Chemical Name: 2,4-D + Dicamba
Chemical Family: Phenoxy Herbicides
Formula: Not applicable, formulated mixture.
Synonyms: None
CAS Number: Not applicable, formulated mixture.
EPA Number: 5905-568

II. PHYSICAL DATA

Boiling Point: >212 Degrees F.
Freezing Point: <32 Degrees F.
Spec Gravity: 1.17 - 1.2 gms/cc
Vapor Pressure: Not determined
Vapor Density: Not determined
Solubility: Emulsifiable
Volatiles: Not determined
Evaporation: Not determined
Melting Point: Not applicable
Appearance: Amber liquid with phenoxy odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
3,6-dichlormethoxybenzoic acid (Dicamba)	1918-00-9	18.28	N/E	Slight skin & severe eye irritant.
2,4-Dichlorophenoxyacetic Acid (2,4-D)	94-75-7	24.62	N/E	Slight skin & severe eye irritant.
Inert ingredients, including a proprietary blend of surfactants, emulsifiers and water.		57.10	N/E	Mild skin irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Not determined
Autoignition Temp: Not determined
Flammable Limit: Not determined
Extinguishing Media: Use foam, water spray, dry chemical and carbon dioxide extinguishing agents.
Special Fire Fight Proc: Wear self-contained breathing apparatus and

Material Safety Data Sheet

Effective Date: 21-AUG-2009
Product: BRUSH-RHAP, HELENA

full protective clothing. Contain and dispose
of fire fighting waters.

Fire and Expl Hazard: Under fire conditions, toxic and corrosive
fumes are emitted.

V. HEALTH HAZARD

Carcinogen Information: Not listed.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Harmful if ingested. May cause nausea,
vomiting, abdominal pain or decreased blood
pressure. Aspiration of swallowed or vomited
product can cause severe pulmonary
complications.

Skin Absorption: Harmful if absorbed through the skin. May
cause decreased blood pressure, muscle
weakness and spasms.

Inhalation: Harmful if inhaled. May cause muscle weakness,
muscle spasms and decreased blood pressure.

Skin contact: May cause skin irritation with repeated or
prolonged contact.

Eye Contact: Can cause corneal opacity and irreversible eye
damage with contact. Vapors and mists may cause
eye irritation.

Chronic Effects: Prolonged contact can cause liver, kidney and
muscle damage.

Other Hazard: None currently known.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Give 2 to 3 glasses of water to drink. Do not
induce vomiting as this may cause aspiration.
Seek medical attention immediately. To prevent
aspiration of swallowed product, lay victim on
side with head positioned lower than the waist.

Skin: Immediately wash skin with soap and water. Seek
medical attention if irritation persists.

Inhalation: Move to fresh air. If breathing is difficult,
administer oxygen. If not breathing administer
CPR. Seek immediate medical attention.

Eyes: Immediately flush eyes with water, continuing
for at least 15 minutes while holding the
eyelids apart. Seek immediate medical
attention, preferably with an ophthalmologist.

Notes to Physician: There is no specific antidote for this

Material Safety Data Sheet

Effective Date: 21-AUG-2009
Product: BRUSH-RHAP, HELENA

mixture. All treatment should be directed toward control of the symptoms and the clinical condition of the patient. This product contains 2,4-D acid, a phenoxy herbicide. Myotoxic effects may include muscle fibrillations, myotonia and muscular weakness. Ingestion of massive amounts may result in persistent lowered blood pressure. Myoglobin and hemoglobin may be found in the urine. Elevations of lactate dehydrogenase (LDH), SGOT, SGPT and aldolase indicate the extent of muscle damage. If large amounts have been ingested, the stomach should be evacuated by gastric intubation with the aid of a cuffed endotracheal tube to prevent exposure of the esophagus.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: Avoid extreme heat, open flames, sparks or static electricity.
Polymerization: Will Not Occur
Conditions to Avoid: None currently known.
Incompatibility material: Avoid contact with strong oxidizing agents.
Hazardous Combustion: Hydrogen chloride and oxides of carbon may be produced under fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Contain spill using absorbent or impervious materials, such as earth, clay or sand. Collect and place in plastic recovery drums for proper disposal. Do not allow spilled product or cleanup materials to enter sewers, waterways, lakes, streams or ponds.
Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: When respirators are required, use NIOSH-approved equipment based on actual or potential airborne concentrations.

Material Safety Data Sheet

Effective Date: 21-AUG-2009
Product: BRUSH-RHAP, HELENA

Ventilation: Local (mechanical) exhaust normally sufficient.
Gloves: Impervious gloves.
Eyes: Splashproof goggles.
Other: Eyewash station, emergency shower, impervious apron and footwear.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, ponds or drains with this product.
Other precaution: Do not breathe vapors or mists. Avoid contact with eyes and skin. Do not ingest. Use handling, storage and disposal procedures to prevent contamination of water, food or feed. Store in an area away from ignition sources and oxidizing substances.

X. SHIPPING INFORMATION

Shipping name: Not regulated by DOT in containers <41.67 gallons. See Transportation Note below.
Hazard Class: None
Identification No: None
Labels Required: None required
Placarding: None
Freight Class: Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

Chemical Name

Equivalent R.Q.

2,4-D Acid (CAS No. 94-75-7)

100 lbs. (2.4 lbs/gal)/41.67 gallons

Dicamba (CAS No. 1918-00-9)

1,000 lbs. (1.8 lbs/gal)/555.55 gallons

TRANSPORTATION NOTE:

If container >= 41.67 gallons, ship as:

RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Acid), 9, UN3082, PG III "ERG # 171"

If container >= 555.55 gallons, ship as:

RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Acid, Dicamba), 9, UN3082, PG III "ERG # 171"

XI. GENERAL PRODUCT INFORMATION

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

24-AUG-2009 15:54:08
Page 5 Of 5

Material Safety Data Sheet

Effective Date: 21-AUG-2009
Product: BRUSH-RHAP, HELENA

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2 Fire: 2 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y	Delayed (Chronic) Health: Y
Sudden Release of pressure: N	Fire: Y
Reactive: N	

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
Helena Chemical Company believes that the data contained herein is factual.
This data is not to be taken as a warranty or representation of legal
responsibility. It is offered solely for your consideration, investigation
and verification.