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

Material Safety Data Sheet

Effective Date: 28-JAN-2008
Product: SHOWDOWN

I. IDENTIFICATION

Chemical Name: Glyphosate

Chemical Family: Herbicide mixture of glyphosate salts Formula: Not applicable, formulated mixture.

Synonyms: None

CAS Number: See ingredients statement, Section III.

EPA Number: 71368-25-5905

II. PHYSICAL DATA

Boiling Point: Not determined Freezing Point: Not determined Spec Gravity: 1.164 gms/cc Vapor Pressure: Not determined Vapor Density: Not determined

Solubility: Soluble

Volatiles: Not determined Evaporation: Not determined Melting Point: Not applicable

Appearance: Light to medium red colored liquid, slight

odor.

III. INGREDIENTS

Material	CAS Number	Percent TLV	Hazard
Glyphosate, N- (phosphonomethyl) glycine, in the form of its isopropylamine salt.	38641-94-0	37.54	Moderate eye & slight skin irritant.
Glyphosate, N- (phosphonomethyl) glycine, in the form of its monoammonium salt.	114370-14-8	3.42	Skin & eye irritant.
Inert ingredients, including Ethoxylated Tallowamines (CASRN 61791-26-2)		59.04	Skin & eye irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Aqueous solution Autoignition Temp: Not determined Flammable Limit: Not determined

Extinguishing Media: Use foam or water spray for large fires. For

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small fires, use dry chemical or carbon dioxide

extinguishing agents.

Special Fire Fight Proc: Wear self-contained breathing apparatus and

full protective clothing. Dike area to prevent runoff and contamination of water sources. Collect fire control water for disposal later.

Fire and Expl Hazard: This product reacts with galvanized steel or

unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or

explode.

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V. HEALTH HAZARD

Carcinogen Information: Not listed by IARC, NTP or OSHA.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Acute Oral LD50 (rat) > 5,000 mg/kg. Slightly

toxic by ingestion.

Skin Absorption: Acute Dermal LD50 (rat) > 5,000 mg/g. Slightly

toxic by absorption.

Inhalation: Acute Inhalation LC50 (rat) > 2.12 mg/L/4

hour. Low inhalation toxicity.

Skin contact: Slightly irritating based on toxicity studies.

Not a skin sensitizer in lab animals following

repeated skin exposure.

Eye Contact: Slightly irritating with eye contact based on

toxicity studies.

Chronic Effects: None currently known.

Other Hazard: None known.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Call a poison control center or doctor immediately for treatment advice. Sip a glass of water if able to swallow. Do not induce

vomiting unless told to do so by the poison control center or doctor. Do not give anything

by mouth to an unconscious person.

Skin: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor

for treatment advice.

Inhalation: Move to fresh air. If not breathing, call 911

or an ambulance, then give artificial

respiration, preferably by mouth-to-mouth, if

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possible. Call a poison control center or

doctor for further treatment advice.

Eyes: Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes then continue rinsing. Call a poison control center

or doctor for treatment advice.

Notes to Physician: In the event of an adverse response, treatment

should be directed toward control of the symptoms and the clinical condition of the

patient.

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VI. REACTIVITY

Stability: Stable

Conditions to Avoid: Avoid excessive heat. Do not store near heat or

flame.

Polymerization: Will Not Occur

Conditions to Avoid: None currently known.

Incompatibility material: Avoid strong oxidizing agents, such as bases and

acids. Reacts with galvanized steel or unlined

steel to produce hydrogen gas.

Hazardous Combustion: May produce gases such as oxides of carbon,

nitrogen and phosphorous.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Dike spill using absorbent or impervious

materials such as earth, sand, sawdust or clay. Collect and contain contaminated absorbent and

diking materials for disposal.

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: None needed under normal use conditions. Ventilation: Local exhaust ventilation at the point of

generation.

Gloves: Chemical-resistant gloves.

Eyes: Chemical goggles or safety glasses w/side shields

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Other: Eyewash station, emergency shower, long-sleeved

shirt and long pants, socks and shoes.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not

contaminate water supplies, lakes, streams, ponds or storm drains with this liquid. Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined

containers.

Other precaution: This product or spray solutions of this product

may react with containers or tanks made of galvanized steel or unlined steel (except stainless) to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious

personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or

other ignition sources.

X. SHIPPING INFORMATION

Shipping name: Not regulated by DOT, IATA, or IMDG.

Hazard Class: None Identification No: None

Labels Required: None required

Placarding: None

Freight Class: Compound, Weed Killing, Liquid (Glyphosate),

N.O.I. (NMFC Item 50320, Class 60)

Chemical Name Equivalent R.Q.

Not applicable Not applicable

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:

(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum

Health: 2 Fire: 1 Reactivity: 1

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

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

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.