

MATERIAL SAFETY DATA SHEET

Syngenta Crop Protection, Inc. Post Office Box 18300

Greensboro, NC 27419

In Case of Emergency, Call 1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: PRINCEP CALIBER 90 Product No.: A6119B

EPA Signal Word: Caution

Active Ingredient(%): Simazine (90.0%) CAS No.: 122-34-9

Chemical Name: 2-chloro-4,6-bis(ethylamino)-s-triazine

Chemical Class: Triazine Herbicide

EPA Registration Number(s): 100-603 Section(s) Revised: 14

2. HAZARDS IDENTIFICATION

Health and Environmental

Harmful if inhaled. May be harmful in contact with skin. Causes mild eye and skin irritation.

Combustible powder.

Hazardous Decomposition Products

None known.

Physical Properties

Appearance: Light beige to brown grey granules

Odor: Odorless

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

See also Sec. 7.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Kaolin Clay	15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)	2 mg/m³ TWA (respirable)	10 mg/m³ TWA (total); 5 mg/m³ TWA (respirable) **	No
Simazine (90.0%)	Not Established	Not Established	10 mg/m³ TWA ***	No

^{**} recommended by NIOSH

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications. Syngenta Hazard Category: B

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

^{***} Syngenta Occupational Exposure Limit (OEL)

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment

advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an

unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if

present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or

doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial

respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or

doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air): Lower: Not Applicable Upper: Not Applicable

Autoignition Temperature: Not Available

Flammability: Combustible powder

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

See also Sec. 7.

In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Sweep up material and place in a compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags

(FIBC) used to contain this material should be Type B, Type C or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to contain this material, make certain the metal parts are bonded to the filling equipment and grounded.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE. FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for

exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use dust-proof chemical goggles.

Skin Contact: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber,

neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and

chemical-resistant footwear.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to

comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, or P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light beige to brown grey granules

Odor: Odorless
Melting Point: 437 - 441 °F
Boiling Point: Not Applicable
Specific Gravity/Density: 23 lbs/ft³

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pH: 7 - 10 (10% suspension in H2O)

Solubility in H2O

Simazine: 6.2 mg/l @ 72°F (22°C)

<u>Vapor Pressure</u>

Simazine: 2.2 x 10(-2) mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Materials to Avoid: None known.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:

Oral (LD50 Rabbit): > 5000 mg/kg body weight

Dermal:

Dermal (LD50 Rat) : > 2000 mg/kg body weight

Inhalation:

Inhalation (LC50 Rat) : > 2.5 mg/l air - 4 hours

Eye Contact: Minimally Irritating (Rabbit)
Skin Contact: Slightly Irritating (Rabbit)
Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Simazine: None observed.

Chronic/Subchronic Toxicity Studies

Simazine: Decreased survival at high doses (rats).

Carcinogenicity

Simazine: Increased incidence of mammary tumors (female Sprague-Dawley rats) sex and species specific effect.

Other Toxicity Information

None

Toxicity of Other Components

Kaolin Clay

May cause eye and respiratory tract irritation.

Long-term exposure to high concentrations of this dust may produce x-ray evidence of dust in the lungs.

Continued long-term exposure may affect respiratory function in some individuals.

Target Organs

Active Ingredients

Simazine: Mammary gland

Inert Ingredients

Kaolin Clay: Eye, respiratory tract, lung

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Simazine:

Fish (Rainbow Trout) 96-hour LC50 > 10 ppm

Invertebrate (Water Flea) Daphnia Magna EC50 1.1 ppm

Bird (Mallard Duck) 8-day LD50 > 4640 mg/kg

Green Algae 24-day EC50 2.0 ppm

Environmental Fate

Simazine:

The information presented here is for the active ingredient, simazine.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Moderate mobility in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Not regulated.

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Simazine), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3077

Packing Group: PG III

Air Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Simazine)

Hazard Class: Class 9

Identification Number: UN 3077

Packing Group: PG III

Note: This product is currently not regulated for airfreight within the NAFTA region. However, effective 01/01/2011 the

above classification must be used.

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Fire Hazard

Section 313 Toxic Chemicals: Simazine (90.0%) (CAS No. 122-34-9)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings		0	Minimal
Health:	1	Health:	1	1	Slight
Flammability:	3	Flammability:	3	2	Moderate
Instability:	0	Reactivity:	0	3	Serious
	-			4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 11/25/1985

Revision Date: 8/31/2010 Replaces: 12/8/2009

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

End of MSDS