

MATERIAL SAFETY DATA SHEET

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HAZARD RATING (HMIS)	
HEALTH	: 3*
FLAMMABILITY	: 1
REACTIVITY	: 1
PERSONAL PROTECTION:	J

IDENTITY

Product Name	CAS Number
Gustafson Captan 30-DD Seed Protectant	Mixture
Chemical Family	Chemical Name & Synonyms
Mixture	N-(trichloromethyl) thio-4-cyclohexene-1,2-dicarboximide
Chemical Formula	Trade Name & Synonyms
Mixture	Captan

HAZARDOUS INGREDIENTS

Hazardous Components (CAS No.)	%	OSHA PEL	ACGIH TLV	Other TLV
Captan and related derivatives (133-06-2)	30.0	5 mg/m ³	5 mg/m ³	NE
Rhodamine Dye (81-88-9)	1.7	NE	NE	NE
Proprietary Binder	Trade Secret ¹	5 mg/m ³	5 mg/m ³	NE

¹Identity available as provided in 29 CFR 1910.1200(i).

PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Appearance	pH (As Is)	Freezing Pt.	Sp. Grav.
Liquid	4.0 - 6.8	20°F	1.18
Vapor Density	Color	Bulk Density	Boiling Point
NE	Red	9.8 lb/gal	215°F.
Vapor Pressure	Sol. (Water)	Odor	% Volatiles
NE	Miscible	Fungent	NE
Flash Point		Extinguishing Media	
>200°F (COC)		Water fog, CO ₂ , Foam	
Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus if involved in fire.			
Unusual Fire Or Explosion Hazards: May decompose under fire conditions to give off toxic materials.			

HEALTH HAZARDS

Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
>5000 mg/kg (Rat)	>2000 mg/kg	NE
Effects To Eyes	Effects To Skin	Route(s) of Entry
Severe eye irritant	Moderate	Dermal, Inhalation
Effects of Acute Overexposure: Lacrimation, depression, labored breathing, irritability, oliguria, alkaluria, glycosuria, hematuria and mortality. May cause allergic skin reaction.		
Effects Of Chronic Overexposure: Captan and Rhodamine have caused cancer in laboratory animal testing. Captan has caused reproductive effects in laboratory animal testing.		

Emergency First Aid Procedures

Skin: Wash skin with soap and warm water. If additional symptoms develop, see a physician.
 Eyes: Wash eyes with flowing water for at least 15 minutes. Obtain immediate medical attention.
 Ingestion: If conscious, induce vomiting. Call a physician.
 Inhalation: If not breathing, administer CPR. Remove to fresh air if irritation or any symptoms develop. If symptoms persist, call a physician.

NORMAL HANDLING PROCEDURES

Precautions To Be Taken In Handling And Storage: Do not get into eyes, on skin or on clothing. Do not take internally. Avoid breathing fumes or mist. Upon contact, wash exposed areas with soap and warm water. Store in a cool, dry area away from food or feed in an area designated for pesticides.

Corrosive Action On Materials (Metals, Plastic, Rubber, Etc.): NE

PROTECTIVE EQUIPMENT

Eyes: Goggles or face shield
Gloves: Impervious
Other: NIOSH/MHSA approved respirator, coveralls

VENTILATION REQUIREMENTS

Local exhaust or general ventilation required when dictated by local conditions.

SPILL OR LEAKAGE PROCEDURES (CONTROL PROCEDURES)

Steps To Be Taken In Case Material Is Released Or Spilled: Wear appropriate safety equipment. Absorb on suitable dry absorbant and shovel or sweep up and place into approved DOT container and seal. Scrub contaminated area with detergent and handle as above. Repeat as necessary. Flush area with water while observing proper environmental considerations.

In case of large spills, notify emergency telephone number on front of this sheet.

Waste Disposal Method: Pesticide wastes are acutely hazardous.

Improper disposal of excess pesticides, wastes or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

REACTIVITY DATA

Stable	[X]	Hazardous	May Occur	[]
Unstable	[]	Polymerization	Will Not Occur	[X]

Conditions to Avoid: Captan decomposes at temperatures above 300 F.
Incompatibility (Material To Avoid): Strong alkaline and oxidizing agents, sulfur, and sulfur with moisture.
Hazardous Decomposition Products: Incomplete combustion can produce HCl, phosgene and carbon monoxide.

SHIPPING DATA

D.O.T. Shipping Name	Reportable Quantity Under CERCLA
RQ Captan Mixture ORM-E NA9099	3.3 lbs
D.O.T. Hazard Classification	Secondary: NA
Primary: ORM-E	Freight Classification
D.O.T. Labels Required	Insecticide or Fungicide,
NA	Agricultural, N.O.I., Liquid

Product No: 7501-9 Issue Date: 10/85 Issued By: JCR
Reason For Issue: Revise MSDS

NE-Not Established NA-Not applicable

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