



Safety Data Sheet

Issue Date: 14-Dec-2022

Revision Date: 13-Sep-2023

Version 3

1. IDENTIFICATION

Product Identifier

Product Name

Captan 480 SC

Other means of identification

SDS #

ADAMA-343-CA

Registration Number(s)

34551 (*Pest Control Products Act*)

Recommended use of the chemical and restrictions on use

Recommended Use

Fungicide.

Details of the supplier of the safety data sheet

Manufacturer Address

ADAMA Agricultural Solutions Canada Ltd.
300 – 191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact ProPharma Group:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Appearance Milky white liquid

Physical state Liquid

Odor Slight characteristic odor

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2

Signal Word

Danger

Hazard statements

harmful if inhaled
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Contaminated work clothing must not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/ attention
 IF ON SKIN: Wash with plenty of water and soap
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Captan	133-06-2	30-60

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications

4. FIRST AID MEASURES

First Aid Measures**Eye Contact**

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

Skin Contact

Take off 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 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 a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Harmful if inhaled. Causes serious eye irritation. May cause an allergic skin reaction
-----------------	--

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.
-----------------------------	--

Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
----------------------------------	---

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
--------------------------------	---

Methods for Clean-Up	Keep in suitable, closed containers for disposal.
-----------------------------	---

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.
--------------------------------	---

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store above 0°C.
Incompatible Materials	None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Captan 133-06-2	TWA: 5 mg/m ³ inhalable particulate matter	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³

Appropriate engineering controls

Engineering Controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use splash goggles or face shield when contact may occur.

Skin and Body Protection

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

General Hygiene Considerations

Wash hands before eating, drinking, smoking and using the toilet. Remove contaminated clothing promptly and wash thoroughly before reused. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Slight characteristic odor
Appearance	Milky white liquid	Odor Threshold	Not determined
Color	Milky white		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not applicable		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not determined		
Flash Point	Not determined		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not determined		
Flammability Limits in Air			
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	1.24 g/ml		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not an explosive		
Oxidizing Properties	Not an oxidizer		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

May decompose if heated

Conditions to Avoid

Excessive heat. Avoid moisture. Contact with incompatible materials.

Incompatible Materials

Alkaline materials. Acidic materials.

Hazardous Decomposition Products

Fire will produce irritating, corrosive and/or toxic gases. Hydrogen chloride. Carbon and hydrogen oxides. Nitrogen oxides (NOx). Oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye Contact	Causes serious eye irritation.
Skin Contact	May cause an allergic skin reaction.
Inhalation	Harmful if inhaled.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Captan 133-06-2	= 3573 mg/kg (Rat) = 9 g/kg (Rat)	> 5 g/kg (Rat) > 5000 mg/kg (Rat)	= 0.72 mg/L (Rat) 4 h

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

Carcinogenicity Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Captan 133-06-2	A3	Group 3		

Numerical measures of toxicity

Acute Oral LD50 (Rat): >2,000 mg/kg

Acute Dermal LD50 (Rabbit): >2,000 mg/kg

Acute Inhalation LC50 (Rat): >2.06 mg/L (4-hr)

Eye Irritation: Causes serious eye irritation.

Dermal Irritation: Non-irritating.

Dermal Sensitization: Skin sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Captan 133-06-2		126: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.16: 96 h Lepomis macrochirus mg/L LC50 0.0666 - 0.0804: 96 h Oncorhynchus mykiss mg/L LC50 static 0.075: 96 h Oncorhynchus mykiss mg/L LC50 0.047 - 0.111: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.059 - 0.070: 96 h Pimephales promelas mg/L LC50 flow-through 0.3: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.168 - 0.238: 96 h Pimephales promelas mg/L LC50 static 0.119 - 0.167: 96 h Lepomis macrochirus mg/L LC50 static	7 - 9.9: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected."

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations. Canadian formulators using this product should dispose of unwanted active ingredient and containers in accordance with municipal or provincial regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

14. TRANSPORT INFORMATION

DOT

UN/ID No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. (captan)
Hazard Class	9
Packing Group	III
Marine Pollutant Reportable Quantity	This material ships as a marine pollutant when single container exceeds 119 gal/ 882 lbs 10 lbs

IATA

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (captan)
Hazard Class 9
Packing Group III
Marine Pollutant This material ships as a marine pollutant when inner packagings exceed 5L/5KG

IMDG

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (captan)
Hazard Class 9
Packing Group III
Marine Pollutant This material ships as a marine pollutant when inner packagings exceed 5L/5KG

TDG

Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by road or railway vehicle.

15. REGULATORY INFORMATION

REGULATORY INFORMATION**International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AIC
Captan			X					

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - 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

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 3	Flammability 1	Instability 1	Special Hazards None
<u>HMIS</u>	Health Hazards 3	Flammability 1	Physical hazards 1	Personal Protection See Section 8

Revision Date: 13-Sep-2023
Revision Note: Regulatory update

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