

MATERIAL SAFETY DATA SHEET**CAPTAN 480 SC****01 Identification of the substance/preparation and of the company/undertaking****1.1 Product identifier**

Trade name Captan 48% SC, Captan 480 SC

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Fungicide for agricultural use

1.3 Supplier**Sharda Cropchem Ltd. (formerly known as Sharda Worldwide Exports Pvt. Ltd.)**2nd floor, Prime Business Park

Dashrathlal Joshi Road

Vile Parle (West)

Mumbai - 400056 India

T + 91 22 6678 2800 - F + 91 22 6678 2828

regn@shardaintl.com**1.4 Emergency telephone no.:**

CANUTEC 1(613) 996-6666 / 1-888-226-8832

02 Hazard identification**2.1 Classification of the substance or mixture**

Classification according to Directive 67/548/EEC or 1999/45/EC: R38-R43-R40-R50

Classification according to Regulation (EC) No. 1272/2008 [CLP]: H317; H351; H400

2.2 Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):



GHS08



GHS09

Signal word (CLP)

warning

Hazard statements (CLP)

H351 - Suspected of causing cancer.

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

Precautionary statements (CLP)

P201 - Obtain special instructions before use

P308+P313 - IF exposed or concerned: Get medical advice/ attention

P501 - Dispose of contents/container to an approved waste disposal plant

P280 - Wear protective gloves, protective clothing, face protection

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

P391 - Collect spillage

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

03 Composition/information on ingredients

3.2 Mixtures

Chemical name	CAS-no	Concentration % w/w	Classification according to Directive 67/548/EEC	Classification according to Regulation 1272/2008	
			Hazard Symbol R phrases	Hazard category	H phrases
Captan	CAS-No. 133-06-2 EC-No. 205-087-0 Index-No. 613-044-00-6	41.63	Carc. Cat. 3 R40; T R23; Xi R41; R43; N R50	Carc. 2 Acute Tox 3 Eye Dam.1 Skin sens.1 Aqua.acute 1	H351 H331 H318 H317 H400
Acetic acid	CAS-No. 64-19-7 EC-No. 200-580-7 Index-No. 607-002-00-6	<2	R10 C; R35	Flam.liq.3	H226
Hexamethylenetetramine	CAS-No. 100-97-0 EC-No. 202-905-8 Index-No. 612-101-00-2	<2	F; R11 Xi; R43	Flam. Sol. 2 Skin Sens. 1	H228 H317

04 First aid measures

4.1 Description of first aid measures

General advice	Always bring the original product container, label and safety data sheet with you when calling the emergency number or visiting a doctor for treatment.
Inhalation	Move exposed person to fresh air.
Skin contact	Remove contaminated clothes immediately and wash with water.
Eye contact	Wash contaminated eyes immediately under flowing water, keep eyelids open.
Ingestion	Wash out of mouth immediately with water and contact local emergency.

05 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray (not splash), dry extinguishing powder, foam, carbon dioxide

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products Carbon monoxide, carbon dioxide and nitrogen oxides can be released

5.3 Advice for firefighters Wear self-contained breathing apparatus and a special tightly suit.

06 Accidental release measures

6.1 Personal Precautions, protective equipment and emergency procedures

For non –emergency personnel	In an emergency respiratory protection must be worn. Wear eye protection, hand protection and full body protection.
Protective equipment	Be careful and avoid rising dust. Ventilate area afterwards and wash the spilled site. Larger spills maybe a hazard to the surrounding atmosphere. Inform the authorities.
Emergency procedures	Evacuate area in case of emergency.
For emergency responders	Depending on the risk, wear a tight, long apron and boots or suitable chemical protection clothing. Clothing should be dust tight protective. Respiratory protection must be worn. Wear glasses with side protection. Always use gloves.

6.2 Environmental precautions Endangerment of drinking water and environment. Do not allow runoff to get into the sewage system. Avoid escape into ground, lake or streams under all circumstances. Inform responsible authorities in case of escape.

6.3 Methods and material for cleaning up

For cleaning up Clear spillage immediately by carefully sweep up spills. Collect spilled quantities in a clearly labeled container with a systematic description of its contents and with the hazard symbol and the R and S phrases. Entrust to the appropriate authorities for disposal. Wash area thoroughly immediately after removal of spills.

Other information Textile or leather gloves are completely unsuitable.

6.4 Reference to other sections

For disposal of spill see section 13

For protective measures see section 8

07 Handling and storage

7.1 Protective measures

Measures to protect the environment Do not allow runoff to get into the sewage system. Do not contaminate surface waters or ditches with chemical or used container.

Advice on general occupational hygiene Do not eat, drink or smoke in work areas.
Wash hands after use
Remove contaminated clothing and protective equipment before entering eating areas. Wash all protective clothing thoroughly after use.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions Keep in original container, tightly closed and in a safe place.
Keep dry and frost proof in a suitable pesticide store.
Recommended storage is at room temperature in a well-ventilated place. Protect from exposure to light.

Further information on storage conditions Wash out container thoroughly, empty washings into spray tank and dispose of safely.

7.3 Specific end uses

Fungicide application

08 Exposure controls/personal protection**8.1 Control parameters**

No exposure limits available

8.2 Exposure controls

Protective measures	Priority technical measures.
Respiratory protection	Particle filters P2 or P3, color code white if needed.
Hand protection	Wear gloves. Textile and leather gloves are completely unsuitable.

09 Physical and chemical properties**9.1 Information on basic physical and chemical properties of the mixture**

Physical state	Liquid; Suspension concentrate
Appearance	light ivory liquid
Odour:	Aromatic
pH (1% aqueous solution)	3.8
Vapour pressure	2.01 x 10 ⁻⁴ Pa at 50°C (captan)
Relative density	1.153 g/mL at 20°C
Surface tension	44.4 mN/m (1% dilution)
Solubility in water (20°C)	not applicable (suspension concentrate)
Flash point:	not applicable
Auto-ignition temperature	not applicable
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

10 Stability and Reactivity

10.1 Reactivity	No information available
10.2 Chemical stability	No information available
10.3 Possibility of hazardous reactions	No information available
10.4 Conditions to avoid	No information available
10.5 Incompatible materials	No information available
10.6 Hazardous decomposition products	No information available

11 Toxicological information**11.1 Information on toxicological effects**

Mixture Captan 480 SC

Acute toxicity:	Skin irritant and skin sensitizer
Mutagenicity:	No effects (based on properties of ingredients)
Reproductive toxicity:	No effects on reproduction (based on properties of ingredients)
Carcinogenicity:	Limited evidence of carcinogenic effect (captan)
Teratogenicity:	No effects (based on properties of ingredients).

11.2 Relevant toxicological properties of the mixture:

LD ₅₀ (oral, rat):	> 2500 mg/bw kg
LD ₅₀ (dermal, rat):	> 2000 mg/bw kg

LC₅₀ (inhalation, rat): > 3.6 mg/L air
 Skin irritation (rabbit): irritant
 Eye irritation (rabbit): not irritant
 Skin sensitization (guinea pig): sensitizer (based on captan)

11.3 Information on likely routes of exposure:

Ingestion, inhalation, skin and eye contact.

11.4 Other information:

No data available.

12 Ecological information

12.1 Toxicity

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Experimental data (captan)

EC₅₀ (48h) Daphnia magna: 3.4mg/L (captan)
 EbC₅₀ (72h) algae: 1.6 mg/L (captan)
 LC₅₀ (96h) trout: 98 µg/L (captan)

12.2 Persistence and degradability of the active substance captan

Persistence: Not persistent (captan)
 Biodegradation: Not readily biodegradable (captan)

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Pow): 2.57 (captan)

12.4 Mobility in soil

Mobile in soil (captan)

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

None reported

13 Disposal considerations

13.1 Waste treatment methods

Product / Packaging disposal	Wash out container thoroughly, empty washings into spray tank and dispose of in compliance with local regulations.
Sewage disposal-relevant information	Do not empty into sewage systems

14 Transport Information

14.1 UN number 3082
14.2 UN proper shipping name Environmentally hazardous substance, Liquid N.O.S. (contains captan)
14.3 Transport hazard classes 9, miscellaneous items and materials
14.4 Packing group III
14.5 Environmental hazards Marine Pollutant
14.6 Special precautions for user Check specific local regulations in force.

14.7 Transport regulations (TDG) : Not regulated by TDG when transported solely on land by road or railway vehicle.
Transport regulations : Not Regulated

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This MSDS is prepared to comply with regulation EC no. 1907/2006 and its updates:

Relevant national legislation applicable may be found in the national MSDS.

Regulated under the Pest Control Product Act

Chemical safety assessment: Refer to sections 7 and 8 for relevant advice.

16 Other information

For use instructions, refer to product label.

Full text of classification provided in sections 2 and 3 are given below for ease of reference

R10 Flammable
R11 Highly flammable
R23 Toxic by inhalation
R35 Causes severe burns
R40 Limited evidence of carcinogenic effects
R41 Risk of serious damage to eyes
R43 May cause sensitization by skin contact
R50 Very toxic to aquatic organisms
H351 Suspected of causing cancer.
H317 May cause an allergic skin reaction
H400 Very toxic to aquatic life
H226 Flammable liquid and vapour
H318 Causes serious eye damage
H331 Toxic if inhaled
H228 Flammable solid\

DISCLAIMER:

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Sharda CropChem Ltd will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant MSDS. Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.