



Material Safety Data Sheet

Product Name: MBTS

Effective Date: August. 1, 2007

● CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: MBTS (DM)

Chemical Name: Mercaptobenzothiazole Disulfide

Uses: Accelerator

Manufactured by: Northeast Auxiliary Chemical Industry Co., Ltd

Wuqiang Industry Park

Hebei, China

Tel: +86-318-3791833

Fax: +86-318-3835598

Http://www.dongzhuhg.com

● COMPOSITION/INFORMATION ON INGREDIENTS

Mercaptobenzothiazole Disulfide 97—99%

CAS # 120-78-5

Paraffin oil 1-3%

CAS # 8042-47-5

● HAZARD IDENTIFICATION

Hazard information

Emergency Overview: WARNING! Combustible dust-explosion potential. Keep away from Heat, Sparks, and flame. Dust may be irritating to eyes and upper tract.

Eye Contact: May cause mild eye irritation. Mile Eye Irritation: Signs/symptoms can include redness, swelling. Pain and tearing.

Skin Contact: May cause an allergic skin reaction. May cause a rash and itching of the skin. May cause skin defatting with prolonged exposure.

Inhalation: May cause mild respiratory irritation.

Ingestion: Swallowing a relatively large amount of tis material is unlikely to produce serious illness or death.

Add: Wuqiang Industry Park, Wuqiang, Hebei 053300, China



Material Safety Data Sheet

Product Name: MBTS

● First Aid Information

In Eyes:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
On Skin:	Remove contaminated clothing. Wash skin with water, using soap if available. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.
Inhaled:	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Swallow:	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Notes to Physician:	Provide symptomatic/supportive care as necessary. Treatment based on sound judgment of physician and individual reactions of patient.

● FIRE FIGHTING MEASURES

Flash Point (F/C)	520F/271 C
Autoignition Temp. (F/C):	680 F/ 360 C
Lower Explosion Limit in Air(LEL)	Not Determined
Upper Explosion Limit in Air (UEL)	Not Determined
Extinguishing Media:	Water fog, carbon dioxide, foam, dry chemical
Special Exposure Hazards	Fight fire from a safe distance and from a protected location. Flammable dust when in finely divided and highly suspended state. Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not allow runoff to enter waterways.
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment
Unusual Fire/Explosion Hazards:	Toxic emissions may result if product is involved in a fire. Fire produces highly toxic sulfur dioxide gas

● ACCIDENTAL RELEASE MEASURES

Spill Procedures:	Wear protective equipment specified. Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal.
Procedure for Cleaning/Absorption:	Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Isolate spill and



Material Safety Data Sheet

Product Name: MBTS

stop leak where safe. Remove ignition sources and work with non-sparking tools. Scoop up and remove. Do NOT spread spilled product with water.

● Handling and Storage

Handling: Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material. Avoid generating or breathing dust. Avoid contact with eyes, skin and clothing. Reclose containers of unused product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not reuse this container.

Storage: Store closed containers in a cool, dry, well-ventilated area. Store away from strong oxidizing materials. Avoid exposure to direct sunlight.

● EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety glasses or goggles to protect against exposure. Eye protection is not required during typical product use conditions

Skin Protection: Normal work coveralls. Launder contaminated clothing before reuse.

Gloves: Use gloves as a standard industrial handling procedure. All cleanable impervious glove types are acceptable.

Respiratory Protection: Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. Firefighting; Use a positive pressure demand full face self contained breathing apparatus.

Ventilation: General; Local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product. Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with the applicable air pollutions control regulations. Eliminate ignition sources.

Airborne Exposure Limits: Nuisance Dust. OSHA PEL/8hr-TWA=15mg/m³ (Total Dust). OSHA PEL/8-Hr TWA=05mg/m³ (Respirable Dust).AGGIH TLV/8-Hr TWA =10mg/m³. White Mineral Oil OSHA PEL/8Hr TWA= 5mg/m³ ACGIH TLV//8Hr TWA = 5mg/m³.

● PHYSICAL AND CHEMICAL PROPERTIES

Add: Wuqiang Industry Park, Wuqiang, Hebei 053300, China



Material Safety Data Sheet

Product Name: MBTS

Appearance:	Off-White powder
Odor:	Slight Sromatic
Ph:	N/A
Specific Gravity:	1.45—1.54
Density:	Unknown
Bulk Density:	Not Determined
Melting Point (F/C):	170.0
Boiling Point (F/C):	260 C
Vapor Pressure:	Negligible
Vapor Density (Air=1):	Not Determined
% Volatile by Volume:	< 0.5%
Solubility in Water:	0.01g/100ml @25 C
Other Solubility:	Slightly soluble in Ethanol Acetone.
Viscosity:	Not Determined
Other Data:	Ash Content = 0.3 % max.
Molecular Weight:	332.38
Molecular Formula:	C14-H8-N2-S4

● STABILITY AND REACTIVITY

Chemical Stability:	Stable when stored at room temperature in closed, Original container. Stable under normal conditions of handling, use and transportation.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Keep away from heat, sparks and flame. Dispersion of dust. Temperatures above 250 C. Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.
Materials to Avoid:	Strong oxidizing agents. Strong Acids.
Hazardous Decomposition Products:	Carbon monoxide Oxides of nitrogen Oxides of sulfur.
Additional Guidelines:	Not Applicable.

● TOXICOLOGICAL INFORMATION

Target Organs:	
Acute Oral LD50(mg/kg):	>7940mg/kg



Material Safety Data Sheet

Product Name: MBTS

Acute Dermal LD (mg/kg):	>7940 mg/kg
Acute Inhalation LC50 (mg/l):	Not Determined
Principle Routes of Exposure:	Eyes. Inhalation. Dermal – skin
Ingestion:	Swallowing a relatively large amount of this material is unlikely to produce serious illness or death.
Skin Contact:	May cause an allergic skin reaction. May cause a rash and itching of the skin. May cause skin defatting with prolonged exposure.
Inhalation:	May cause mild respiratory irritation.
Eye Contact:	May cause mild eye irritation. Mild eye irritation: Signs/symptoms can include redness, swelling, pain, and tearing.
Aggravated Conditions:	Pulmonary disorders. Dermal ailments. Eye ailments.
Carcinogenicity Comment:	This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA. Carcinogenicity Category 3
Other:	No other first aid needed. Only hazard is a dust hazard.
Primary Irritation Effect:	Practically non-irritating.
Carcinogenicity:	Negative in standard tests using bacteria and yeast cells
Genotoxicity:	None.
Reproductive/Developmental Toxicity:	A National Toxicology Program (NTP) 2-year study on rats and mice concluded that there was "some evidence of carcinogenic activity" in treated rats.

● ECOLOGICAL INFORMATION

Acute Fish Toxicity:	96Hr LC50 Rainbow Trout = 66.0 mg/l. 96Hr LC50 Bluegill Sunfish = 82.0 mg/l. 96Hr LC50 Fathead Minnow =>1000 mg/l/
Acute Crustaceans Toxicity:	48Hr LC50 Daphnia Magna =82.0 mg/l.
Acute Algae Toxicity:	96Hr EC50 Algae =0.7 mg/l
Octanol /Water Coefficient:	4.5 (Estimated)
Chemical Fate Information:	Sunlight Photolysis: T (1/2) = 3 hours.
Other Information:	Marginally susceptible to indirect photolysis.

● DISPOSAL CONSIDERATIONS

Disposal of Waste Method:

This material is not a RCRA hazardous waste. Bury in a licensed landfill or burn in an approved



Material Safety Data Sheet

Product Name: MBTS

incinerator according to federal, state, and local regulations. Empty containers should be handled in a manner not to cause dusting during collection, Transportation and disposal.

Contaminated Packaging:

If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Dispose of container according to national or local regulations.

● TRANSPORT INFORMATION

DOT :DOT Status:	Not Regulated
DOT Shipping Name:	NONE
DOT Reportable Quantity (lbs):	None
ICAL/IATA: Status:	NOT REGULATED FOR TRANSPORTATION
Proper Shipping Name:	None
UN/NA Number:	NONE
IMDG: Status:	Not Regulated
Proper Shipping Name:	None
TDG (Canada): Status:	Not Regulated

● REGULATORY INFORMATION

Worldwide Inventory Status

TSCA (USA):	Listed
Canadian DSL:	Listed
Canadian NDSL:	N/A
EINECS/ELINCS (Europe):	Listed
Japanese Inventory (ENCS):	Listed
Korean Chemical Inventory (ECL):	Listed
Australian Chemical Inventories: (AICS)	Listed
New Zealand (NZ):	Listed
Phillipines (PICCS) Inventory:	Listed
China (CLECS):	Listed
US Regulatory Rules	
SARA Section 302	None Found
SARA 311/312 Hazard Categories:	Delayed Fire
SARA 313 Chemical:	2-Mercaptobenzothiazole
RCRA Status:	Not a RCRA waste



Material Safety Data Sheet

Product Name: MBTS

Other Regulations:

California Proposition 65: NONE

New Jersey Right-to-Know List: N/A

Pennsylvania Right to Know List: N/A

Florida Right to Know: N/A

Minnesota Right to Know: N/A

MA Right to Know: N/A

FDA Status 21 CFR: Regulated for use under the following sections of 21CFR: 177.2600 Rubber Articles Intended for Repeated Use in Food Contact. 175.105 Components of Adhesives.

Canadian Regulations

WHMIS Hazard Class: D2B TOXIC MATERIALS/ Materials Causing Other Toxic Effects

NPRI: N/A