Safety Data Sheet (SDS)

Revision / Review Date: 5/28/15

1. Chemical Product and Company Identification

Product Name:	TBZTD
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
SDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	Bis (dibenzylthiocarbamoyl) disulfide / Thiuram
Technical Name:	Tetrabenzylthiuram disulfide
Molecular Formula:	C30H28N2S4
Molecular Weight via GPC, Mn:	Not available
Product Use:	Accelerator
OSHA Status:	Not available
CAS No:	10591-85-2
EC No:	404-310-0

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 (CLP):	Chronic aquatic toxicity category 4 – (H413).
Classification according to Directive 67/548/EEC or 1999/45/EC:	R53
Symbols/pictograms/Signal word:	None.
Hazard Statements:	H413- May cause long lasting harmful effects to aquatic life.
Precautionary statements:	P273-Avoid release to the environment. P501- Dispose of contents/ container to an approved waste disposal plant.

3. Composition / Information on Ingredients

Chemical Name	EC No	CAS No	Weight-%
TBzTD	404-310-0	10591-85-2	>=97

4. First Aid Measures

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
Skin:	Remove all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.
Ingestion:	Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Foam, Carbon dioxide (CO2), Water spray (for), Dry chemical.
Unsuitable Extinguishing Media:	Do not use water.
Special Fire Fighting Procedures:	Firefighters should wear self-contained breathing apparatus and full firefighter turnout gear. Collect contaminated firefighting water separately. If must not enter drains. Dispose of fire debris and contaminated firefighting water in accordance with official regulations.
Hazardous Decomposition Products:	Thermal decomposition can lead to release of irritating toxic gases and vapors e.g. Hydrogen cyanide (HCN) Oxides of sulfur Nitrogen oxides (NOx).

6. Accidental Release Measures

Personal precautions, protective equipment and Emergency procedures:	Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Avoid creating dust. Use personal protective equipment as required.
Environmental precautions:	Prevent entry into waterways, sewers, basements or confined areas.
Methods and material for spills:	Collect mechanical and fill in clean and marked plastic

	containers. Dispose of the material collected according to regulations.
Waste Disposal:	Reclaim or dispose of in accordance with local, state, and federal regulations.

7. Handling and Storage:

Precautions to be taken in handling:	Handle in accordance with goo industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes, or clothing. Wash contaminated clothing before reuse. Avoid generation of dust. Ensure the suitable extractors are available on processing machines. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protective equipment as required.
Storage:	Keep container tightly closed in a dry and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Incompatible with oxidizing agents.
Empty Containers:	Empty containers should be taken for local recycling, recovery or waste disposal.

8. Exposure Controls / Personal Protection

Control parameters:	No data available.
Derived No Effect Level (DNEL):	Inhalation Worker-inhalative, long-term-systemic 10 mg/m^3 Inhalation Worker-inhalative, short-term-systemic 20 mg/m^3
Predicted No. Effect Concentration (PNEC):	Soil 1mg/kg soil dw Impact on sewage treatment 100 mg/L Secondary poisoning 66mg/kg food
Exposure controls/Engineering controls:	Ensure adequate ventilation, especially in confined areas. Wash hands during breaks and at the end of the work.
Respiratory Protection:	Use NIOSH approved dust mask in case of dust formation.
Protective Gloves:	Wear protective gloves.
Eye Protection:	Wear safety glasses or chemical goggles to prevent eye contact. Wear a face shield if necessary.
Skin and Body Protection:	Suitable protective clothing.

9. Physical and Chemical Properties

Physical Form:	Solid powder
Appearance & Odor:	White to off-white/ Odorless
Melting point/freezing point:	>= 130 <= 132 °C
Boiling point / boiling range:	>= 147 <= 149 °C(101.3 kPa)
Flash point:	Not available.
Evaporation rate:	Not determined.
Flammability (solid, gas):	Not flammable.
Flammability Limit in Air:	Not determined.
Vapor Pressure:	3.32 Pa(37.7 °C) 1.63 Pa(31.5 °C) 0.85 Pa(24.8 °C)
Vapor density:	Not determined.
Density:	1.12 kg/m3(26 °C)
Relative density:	Not determined.
Specific gravity:	Not determined.
Water solubility:	<= 0.01 mg/L(21 °C)
Partition coefficient (LogPow):	3.7(20 °C)
Auto ignition temperature:	> 140 °C

10. Stability and Reactivity

Stability:	Stable under normal conditions.
Incompatibility (Materials to Avoid):	Acids, bases and strong oxidizing agents.
Conditions to Avoid:	Heat, flames and sparks. Strong oxidizing agents.
Hazardous decomposition products:	In case of fire CO2, CO sulfur oxides (Sox) nitrogen oxides (NOx).

11. Toxicological Information

Acute toxicity:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
TBzTD (CAS #: 10591-85-2)	> 5000 mg/kg bw	-	> 5.03 mg/L air

Skin corrosion/irritation:	Non-irritating to the skin.
Serious eye damage/eye irritation:	No eye irritation.

Germ cell mutagenicity:	No information available.
Carcinogenicity:	Not classified.
Reproductive toxicity:	No information available.
STOT –single exposure:	No information available.
STOT- repeated exposure:	No information available.
Aspiration hazard:	No information available.

12. Ecological Information

Toxicity:

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
TBzTD (CAS #: 10591-85-2)	> 1.7 mg/L/ 72 h(Desmodesmus subspicatus)	> 32 mg/L/ 96 h(Poecilia reticulata)	> 100 mg/L/ 48 h

Persistence and degradability:	Not readily biodegradable.
Bio accumulative potential:	No information available.
Mobility in soil:	No information available.
Results of PBT and vPvB assessment:	This substance is not considered to be very persistent nor very bioaccumulating(vPvB). This substance is not considered to be very persistent, bioaccumulating not toxic (PBT).

13. Disposal Considerations

Waste from residues/unused product:	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging:	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport Information

D.O.T. Shipping Name:	Not regulated.
Air - ICAO (international Civil Aviation Organization):	Not regulated.
Sea - IMDG (International Maritime Dangerous Goods):	Not regulated.

15. Regulatory Information

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
TBzTD 10591-85-2 (97)	X	X	X	X	X	X	X	X

"-" Not Listed
"X" Listed

Chemical safety assessment: A chemical safety assessment has been carried out of this substance.

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.