

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Product code:

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:	Acute Toxicity - Oral [Category 4] Germ Cell Mutagenicity [Category 2] Carcinogenicity [Category 1B] Toxic to Reproduction [Category 2] Aquatic Hazard (Acute) [Category 2] Aquatic Hazard (Long-Term) [Category 2]
Signal word:	Danger!
Hazard Statement(s):	Harmful if swallowed Suspected of causing genetic defects May cause cancer Suspected of damaging fertility or the unborn child Toxic to aquatic life Toxic to aquatic life with long lasting effects

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention] Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If exposed or concerned: [Response] Get medical advice or attention. Collect spillage. [Storage] Store locked up. [Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.). Hazards not otherwise classified: None. [HNOC]

Bis(4-aminophenyl) Sulfide T0632

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number:

Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1- 503-286-7624

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components: Percent: CAS RN: Molecular Weight: Chemical Formula:	Substance Bis(4-aminophenyl) Sulfide >98.0%(HPLC)(T) 139-65-1 216.30 C12H12N2S 4.41 This discription
Synonyms:	4,4'-Thiodianiline , 4-Aminophenyl Sulfide

4. FIRST-AID MEASURES

Description of first aid measures				
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.			
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.			
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.			
Ingestion:	Get medical advice/attention.Rinse mouth.			
Symptoms/effects:				
Acute:	No data available			
Delayed:	May cause heritable genetic damage in humans. Possibly carcinogenic to humans.			

Indication of any immediate medical attention: Not available. Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Specific hazards arising from the chemical:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Sulfur oxides Closed containers may explode from heat of a fire.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.		
7. HANDLING AND STORAGE			
Precautions for safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated. Avoid all contact!		
Conditions for safe storage, including any incompatibilities			
Storage conditions:	Keep container tightly closed. Store in a cool and dark place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents. Air-sensitive		
Packaging material:	Comply with laws.		

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:	Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.
Personal protective equipment Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators
Hand protection:	approved under appropriate government standards and follow local and national regulations. Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Solid Crystal - Powder White - Pale reddish yellow No data available No data available No data available		
Melting point/freezing point:	108°C (226°F)	pH:	No data available
Boiling point/range:	No data available	Vapour pressure:	No data available.
Decomposition temperature:	No data available	Vapour density:	No data available
Relative density:	No data available	Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available		
Log Pow:	No data available	Evaporation rate(Butyl Acetate=1):	No data available
Flash point: Flammability(solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits:	No data available
		Lower:	No data available
		Upper:	No data available
Solubility(ies): [Water] [Other solvents]	Insoluble		
Very soluble:	Ether, Alcohols		

10. STABILITY AND REACTIVITY

Reactivity: Chemical stability: Possibility of hazardous reactions: Incompatible materials: Hazardous decomposition products:

No data available Stable under proper conditions. No special reactivity has been reported. Oxidizing agents Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Sulfur oxides **TCI AMERICA**

11. TOXICOLOGICAL INFORMATION

RTECS Number: BY9625000

Acute Toxicity: ivn-mus LD50:180 mg/kg orl-rat LD50:900 mg/kg	orl-mus LD50:620 mg/kg			
Skin corrosion/irritation: No data available				
Serious eye damage/irritation: No data available				
Respiratory or skin sensitization: No data available				
Germ cell mutagenicity: mmo-sat 10 ug/plate (+S9)	mn	no-sat 5 ug/plate (-S9)		
Carcinogenicity: orl-mus TDLo:113 g/kg/54W-C	orl	-rat TDLo:3600 mg/kg/27D-I		
IARC: Group 2B (Possibly carcino to humans) .	genic NTP: b (Reasonab carcinogens)	ly anticipated to be OSHA:	No data available	
Reproductive toxicity: orl-rat TDLo:250 mg/kg (1-5D preg)				
Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity:				
Fish:	No data available			
Crustacea:	No data available			
Algae:				
	No data available			
Persistence (degradability)				
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available No data available No data available			
	No data available			
Bioaccumulative potential(BCF): Mobility in soil	No data available No data available			
Bioaccumulative potential(BCF): Mobility in soil Log Pow:	No data available No data available 2.18			
Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available 2.18 No data available			
Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc):	No data available No data available 2.18 No data available No data available			
Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available 2.18 No data available No data available No data available Recycle to process if possible. It Local rules and regulations. You and burn in a chemical incineratu intended to provide assistance b with this section ensure regulato Identification and Listing of Haza	ut does not replace these laws, no ry compliance according to the law ardous Waste are listed in 40 CFR nent, drains, water ways, or the soi	aterial with a combustible solvent d scrubber system. This section is or does compliance in accordance v. US EPA guidelines for Parts 261. The product should not	

14. TRANSPORT INFORMATION

DOT (US) UN number: UN3077	Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s	Class or Division: 9 Miscellaneous hazardous material	Packing Group: III
IATA_ UN number: UN3077	Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s	Class or Division: 9 Miscellaneous hazardous material	Packing Group: III
IMDG UN UN3077 numb er:	Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s	Class or Division: 9 Miscellaneous hazardous material	Packing Group: III
EmS number:	F-A, S-F		

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regul CERCLA Hazardo SARA 313: SARA 302:	l <u>ations</u> ous substance and Rep	oortable Quantity: Listed Not Listed		
State Regulations	<u>8</u>			
State Right-to-Kn	ow			
Massachuset	ts	Listed		
New Jersey		Listed		
Pennsylvania	1	Listed		
California Propos	sition 65:	Listed		
Other Information	<u>1</u>			
NFPA Rating:			HMIS Classification:	
Health:	1		Health:	1
Flammability:	0		Flammability:	0
Instability:	0		Physical:	0
International Inve	entories			
Canada: NDSL EC-No:		On NDSL 205-370-9		

16. OTHER INFORMATION

Revision date: 07/06/2018

Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.