

SAFETY DATA SHEET

CHEMICAL DISTRIBUTION SOLUTIONS

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: THIOUREA DIOXIDE - TDO
Control Number: 00140
Product Description: Organosulfur compound

COMPANY IDENTIFICATION

Supplier: Chemical Distribution Solution
1125 Oak St. Ste. 303
Conway, AR 72032

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC
General Information: (501) 978-1111

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification:

[Health]

Acute toxicity, Oral Category 4
Skin irritation Category 2
Eye irritation Category 2A

[Environmental]

Acute aquatic toxicity Category 3
Chronic aquatic toxicity (Category 3)

[Physical]

Self-heating substances
and mixtures Category 1
Specific target organ toxicity –
Single exposure Category 3 –
Respiratory system

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard statement(s)

H251 Self-heating: may catch fire.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P235 + P410 Keep cool. Protect from sunlight.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Aminoiminomethanesulphinic acid	1758-73-2	100

SECTION 4 · FIRST AID MEASURES

FIRST AID PROCEDURES:

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Skin Contact: Brush off excess material. Wash with soap and water. Seek medical attention if irritation develops.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention if symptoms appear.

Ingestion: DO NOT induce vomiting. If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to a victim who is unconscious or having convulsions. Contact a physician or poison control center immediately.

SECTION 5 · FIRE FIGHTING MEASURES

Suitable Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Do not use water jet.

Hazardous combustion products: Oxides of carbon, sulfur and nitrogen

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

Unusual Fire and Explosion Hazards: None known or expected.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Spills: Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Wear appropriate protective equipment, including respiratory protection, as conditions warrant. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

SECTION 7 · STORAGE AND HANDLING

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No Smoking

Storage: Keep container tightly closed. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 36 – 46 °F. Heat sensitive. Moisture sensitive.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Exposure Limits: Contains no substances with occupational exposure limit values.

Personal Protective Equipment (PPE):

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

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SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Non-Combustible
Autoignition Temperature: 824 °F
Boiling Point: Decomposes
Melting Point/Freezing Point: 255 - 261 °F
Vapor Pressure: <0.1 mmHg
Vapor Density (Air-1): 2.6
Odor/Appearance: Light yellow crystalline solid with slight odor.

Flammability Limits: N/A
Relative Density: 1.68
Volatile %: Nil
Evaporation Rate (Water=1): N/A
pH: 4 at 10g/l
Solubility in Water: Partially

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: Keep away from moisture and water.
Incompatible Materials: Strong oxidizing agents
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:
Skin : May cause skin irritation from drying.
Eyes: May cause mild eye irritation from mechanical abrasion.
Inhalation: Urea dust may cause mild irritation of the nose, throat and respiratory tract.
Ingestion: No harmful effects report by ingestion. Swallowing may cause irritation of the digestive tract.

Acute oral toxicity:
LD50 rat: 1,120 mg/kg
Acute inhalation toxicity:
LD50 rat: no available data
Acute dermal toxicity:
LD50 rabbit: > 2,000 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 390 mg/l
Bio-accumulative potential: no available data
Mobility: no available data

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 - TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Thiourea dioxide
Hazard Class 4.2
UN Number: 3341
Packaging Group: 2

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Reactivity Hazard, Acute Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act: This product contains Thiourea dioxide a chemical listed under the CWA.

Clean Air Act: This product contains no chemicals that are listed under the CAA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 · OTHER INFORMATION

MSDS Revision Date: October 2014

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 2

Flammability: 0

Reactivity: 3

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.