LKT Laboratories, Inc.

Safety Data Sheet

Section 1. Product and Company Identification

Product Name Diallyl trisulfide

Product ID D3202

Chemical Name (Synonyms) Allyl trisulfide; DATS

Supplier

LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone # 1-800-424-9300

Section 2. Hazards Identification

GHS Classification Acute toxicity, Oral (Category 3), H301

GHS Label elements including precautionary statements

Pictogram

Signal word **Danger**

Hazard and precautionary statements

Hazard statement
H301 - Toxic if swallowed.
Precautionary statements
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P330 - Rinse mouth.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health hazard: 2
Chronic health hazard: *
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 2
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects
Inhalation - May be harmful if inhaled. May cause respiratory irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.

Ingestion - Acute toxicity. Toxic if swallowed.

Section 3. Composition/Information on Ingredients

Substances

Formula	$C_6H_{10}S_3$	**Formula Wt.**	178.34
CAS No.	2050-87-5	**EC No.**	218-107-8

Section 4. First Aid Measues

General advice Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact Flush eyes with water as a precaution.

Skin Contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Inhalation If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 . Firefighting Measures

Flash Point Not available.

Extingushing Media Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Firefighting Procedures Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards Not available.

Section 6. Accidental Release Measures

Personal Precautions Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
The recommended storage temperature: -20˚C.

Hazardous Decomposition Products Not available.

Other Remarks Synthetic.

Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
PERSONAL PROTECTION
Eye/face protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) of EN 166 (EU).
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State	Liquid. (Synthetic)	**Color**	Clear.
Boiling Point	92ºC Density = 1.116g/ml	**Volatility**	Not available.
Melting Point	Not available.	**Density**	Not available.
Solubility	Soluble in acetone. Slightly soluble in ethanol (3 mg/mL), DMSO (5 mg/mL), 2-propanol, and DMF (10 mg/mL).	**pH**	Not available.
Flash Point	Not available.	**Ignition temperature**	Not available.
Lower explosion limit	Not available.	**Autoignition temperature**	Not available.
Upper explosion limit	Not available.	**Vapor pressure**	Not available.
Water solubility	Not available.	**Odor**	Not available.
Partition coefficient: n-octanol/water	Not available.	**Odor Threshold**	Not available.
Relative vapor density	6.16 - (Air = 1.0)	**Evaporation rate**	Not available.

Section 10. Stability and Reactivity

Stability	Stable under recommended storage conditions. This is a synthetic product.
Materials To Avoid	Strong oxidizing agents.
Hazardous Decomposition Products	Not available.

Possibility of hazardous reactions Not available.

Conditions to avoid Not available.

Section 11. Toxicological Information

Oral LD50 Mouse - 100.0 mg/kg

Inhalation LC50 Not available.

Dermal LD50 Not available.

Other information on acute toxicity Not available.

Reproductive Toxicity Not available.

Specific organ toxicity single exposure (GHS) Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Teratogenicity Not available.

Skin corrosion/irritation Not available.

Serious eye damage/irritation Not available.

Respiratory or skin sensitization Not available.

Germ cell mutagenicity Not available.

Aspiration Hazard Not available.

Synergistic effects Not available.

Additional Information RTECS: BC6168000
To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Signs and symptoms of exposure

Potential Health Effects Inhalation - May be harmful if inhaled. May cause respiratory irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion - Acute toxicity. Toxic if swallowed.

Carcinogenicity **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

Toxicity Not available.

Mobility in soil Not available.

PBT and vPvB assessment Not available.

Persistence and degradability Not available.

Other adverse effects Not available.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 14. Transport Information

DOT (US) UN number: 2810 Class: 6.1 Packing group: III
Proper shipping name: Toxic, liquids, organic, n.o.s. (Diallyl trisulfide)
Reportable Quantity (RQ) Marine pollutant: No Poison Inhalation Hazard: No

IATA UN number: 2810 Class: 6.1 Packing group: III
Proper shipping name: Toxic, liquids, organic, n.o.s. (Diallyl trisulfide)

IMDG UN number: 2810 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (Diallyl trisulfide)
Marine pollutant: No

Further Information

Section 15. Regulatory Information

Reach No. A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

SARA 313 Components 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.

SARA 311/312 Components Acute health hazard.

Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components Diallyl trisulfide CAS #: 2050-87-5 Revision Date:

New Jersey Right To Know Components Diallyl trisulfide CAS #: 2050-87-5 Revision Date:

California Prop 65 Components This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

Updated 7/10/2019

For emergencies in the USA, call
CHEMTREC 800-424-9300