

### Revision number: 2 Revision date: 10/06/2014

# 1. IDENTIFICATION

Product name: Product code: 2,5-Dimethyl-2,4-hexadiene (stabilized with BHT) D0735

For laboratory research purposes.

**TCI AMERICA** 

SAFETY DATA SHEET

Emergency telephone number:

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

Transportation Emergencies:

+1-703-527-3887 (International) Responsible department:

Environmental Health Safety and Security

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-503-286-7624

**TCI** America

Product use: Restrictions on use:

Not for drug or household 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:

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 3]

Signal word:

Warning!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation Flammable liquid and vapor

Pictogram(s) or Symbol(s):



 $\langle ! \rangle$ 

Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting, and equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves, eye protection and face protection. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice skin with

water or shower. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store in a well-ventilated place. Keep cool. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

Hazards not otherwise classified: [HNOC] May cause polimerization.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance		
Components:	2,5-Dimethyl-2,4-hexadiene (stabilized with BHT)		
Percent:	>96.0%(GC)		
CAS Number:	764-13-6		
Molecular Weight:	110.20		
Chemical Formula:	C <sub>8</sub> H <sub>14</sub> Diisocrotyl (stabilized with BHT)		
Synonyms: Stabilizers:	Butylated hydroxytoluene		
4. FIRST-AID MEASURES			
Inhalation:	Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Skin contact:	Call a poison center or doctor if you feel unwell. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Eye contact:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Ingestion:	Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Symptoms/effects:			
Acute: Delayed:	Redness. No data available		
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
5. FIRE-FIGHTING MEASURES			
Suitable extinguishing media:	Dry chemical, $CO_2$ , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.		
Specific hazards arising from the chem			
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Closed containers may explode from heat of a fire.		
have a very low flash point: Use of water s explosion hazard. Containers may explode	t streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or e when heated. Move containers from fire area if you can do it without risk.		
	<b>Inters:</b> athing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations tions. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may		

# 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions:**

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use sparkproof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6. ACCIDENTAL RELEASE MEASURES		
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).	
Emergency procedures:	Isolate area until gas has dispersed. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.	

#### Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

### **Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Combustible substances, Store away from oxidizing agents

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

### Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

### Personal protective equipment

Respiratory protection:	Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Wear protective gloves.
Eye protection:	Splash goggles.
Skin and body protection:	Lab coat.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Slightly pale yello No data available No data available	ЭW	
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	10°C (Freezing point) (50°F) 135°C (275°F) No data available 0.77 No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available 1.0kPa/20°C 3.8 No data available
Partition coefficient: n-octanol/water (log P <sub>ow</sub> )	3.5	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	25°C (77°F) No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data ava Upper: No data ava	ailable

Solubility(ies):

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Water: Insoluble (32mg/L, 25°C) Soluble: Methanol

# 10. STABILITY AND REACTIVITY

Reactivity:	Not Available.
Chemical Stability:	Stable under recommended storage conditions. (See Section 7)
Possibility of Hazardous Reactions:	In use, may form flammable/explosive vapor-air mixture.
Conditions to avoid:	Avoid excessive heat and light.
Incompatible materials:	Strong oxidizing agents
Hazardous Decomposition Products:	No data available

# **11. TOXICOLOGICAL INFORMATION**

Acute Toxicity: No data available				
Skin corrosion/irritation: No data available				
Serious eye damage/irritation: No data available				
<b>Respiratory or skin sensitization:</b> No data available				
Germ cell mutagenicity: No data available				
Carcinogenicity:				
No data available				
IARC: No data available	NTP:	No data available	OSHA:	No data available
<b>Reproductive toxicity:</b> No data available				
Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact.   Symptoms related to exposure: Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Skin contact may result in redness, pain or dry skin. Eye contact may result in redness or pain.   Potential Health Effects: Potential Health Effects:				
Skin and eye contact may result in irritation. Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity Fish: Crustacea: Algae:	48h LC50:4.30 mg No data available No data available	/L (Oryzias latipes)		
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM <sup>3</sup> /mol)	3 - 4 % (by BOD) 155 - 493 (conc. 4 No data available 3.5 No data available No data available	0 ug/L), 150 - 266 (conc. 4 ug/L)		

13. DISPOSAL CONSIDERATIONS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local
	rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide
	assistance but does not replace these laws, nor does compliance in accordance with this section ensure
	regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous
	Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains,
	water ways, or the soil.
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	

DOT (US) UN number: UN3295	Proper Shipping Name: Hydrocarbons, liquid, n.o.s.	<b>Class or Division:</b> 3 Flammable liquid	Packing Group: 	
IATA UN number: UN3295	<b>Proper Shipping Name:</b> Hydrocarbons, liquid, n.o.s.	<b>Class or Division:</b> 3 Flammable liquid	Packing Group: 	
IMDG UN number: UN3295	<b>Proper Shipping Name:</b> Hydrocarbons, liquid, n.o.s.	<b>Class or Division:</b> 3 Flammable liquid	Packing Group:	
EmS number:	F-E, S-D			
15. REGULATORY INFORMATION				
Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.				
US Federal Regulations				
CERCLA Hazardous substance and Reportable Quantity: SARA 313: Not Listed				
SARA 302:				
State Regulations				

HMIS Classification:

Flammability:

Health:

Physical:

2

3

0

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

## **Other Information**

**NFPA Rating:** 

Health:2Flammability:3Instability:0

# International Inventories WHMIS hazard class:

B2: Flammable Liquid. D2B: Materials causing other toxic effects. (Toxic) 212-115-5

EC-No:

16. OTHER INFORMATION

Revision date: 10/06/2014 Revision number: 2

### 16. OTHER INFORMATION

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 gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.