

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

IDENTIFICATION 1.

Product name: Product code:

1,5-Hexadiene-3,4-diol (stabilized with HQ) H0807

For laboratory research purposes.

Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

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: Acute Toxicity - Oral [Category 4] Acute Toxicity - Dermal [Category 3] Flammable Liquids [Category 4] Signal word: Danger! Combustible liquid Hazard Statement(s): Harmful if swallowed Toxic in contact with skin Pictogram(s) or Symbol(s): Precautionary Statement(s): Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear [Prevention] protective gloves and protective clothing. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Wear protective gloves, eye protection and face protection. If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of [Response] water. Call a poison center or doctor if you feel unwell. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store locked up. Store in well-ventilated place. Keep cool. [Storage] [Disposal] 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

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

TCI AMERICA

Score 15. House the second secon			
Percent: >95.0%(GC) CAS Number: 1059-23-4 Molecular Weight: 114.14 Cannical Formula: CJ4/k_O Synonyms: 3.4-Dhydroxy-1.5-bioxadene (stabilized with HQ), Divinylethylene Glycol (stabilized with HG), 1.2-Divinyljoc (stabilized with HQ), Experimental and the synonyms: Stabilizers: Hydrogunone #_FIRST-AID MEASURES Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if victim is on breating. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically precautions to protect themselves. Skin contact: Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if wictim is not 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. Eye contact: If this chemical contacts the fore of teal teal 20 molves. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to water. Ingestion: If this chemical contacts the type: If this chemical contacts the physicitan of Postopure to subtractions to protect themselves. If this chemical contacts the physicitan of Postopure to subtractions to protect themselves. If and chemical contacts theis physicitan of Postopure to subtractions to proto	3. COMPOSITION/INFORMATION		
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	6. ACCIDENTAL RELEASE MEASU	IRES	

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark-
	proof 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.
Personal protective equipment:	Splash goggles. Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or
	equivalent. Wear protective gloves (nitrile).

6. ACCIDENTAL RELEASE MEASURES

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:**

Keep away from living quarters. 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. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. 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:	Store locked up. 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. Store under inert gas (e.g. Argon). Store in refrigerator.
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 - Pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available 198°C (388°F) No data available 1.02 No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	92°C (198°F) No data available	Autoignition tempera Flammability or expl Lower: Upper:	

Solubility(ies): Soluble: Methanol

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid:	Not Available. Air sensitive. Heat sensitive. Light sensitive. Moisture sensitive. In use, may form flammable/explosive vapor-air mixture. Air sensitive. Exposure to air. Exposure to light. Exposure to moisture. Heat sensitive. Light sensitive. Moisture sensitive.
Incompatible materials:	Strong oxidizing agents
Hazardous Decomposition Products:	No data available

11. TOXICOLOGICAL INFORMATION

RTECS Number: MM2100000 Acute Toxicity: orl-rat LD50:1620 uL/kg skn-rbt LD50:400 uL/kg Skin corrosion/irritation: No data available Serious eye damage/irritation: No data available Respiratory or skin sensitization: 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 Reproductive toxicity: No data available Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact. Symptoms related to exposure: Overexposure may result in serious illness or death. **Potential Health Effects:** No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Target organ(s): No data available 12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient:	No data available No data available No data available No data available
n-octanol/water (log P _{ow}) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available

rules and chemica	to process if possible. It is the generator's responsibility to comply with Federal, State and Local d regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a l incinerator equipped with an afterburner and scrubber system. This section is intended to provide
regulato Waste a	ce but does not replace these laws, nor does compliance in accordance with this section ensure y compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous re listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, ivs, 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: UN2810	Proper Shipping Name: Toxic liquids, organic, n.o.s.	Class or Division: 6.1 Toxic material.	Packing Group:
IATA UN number: UN2810	Proper Shipping Name: Toxic liquid, organic, n.o.s.	Class or Division: 6.1 Toxic material.	Packing Group:
IMDG UN number: UN2810	Proper Shipping Name: Toxic liquid, organic, n.o.s.	Class or Division: 6.1 Toxic material.	Packing Group:
EmS number:	F-A, S-A		

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313:	Not Listed
SARA 302:	Not Listed

State Regulations

State Right-to-Know

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

Other Information

NFPA Rating:

EC-No:

Health:2Flammability:2Instability:0

HMIS Classification:

Health:	2
Flammability:	2
Physical:	0

International Inventories

WHMIS hazard class:

B3: Combustible Liquid. D1B: Materials causing immediate and serious toxic effects. (Toxic) D2A: Materials causing other toxic effects. (Very Toxic) 213-955-5

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.