

# TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: Divinylbenzene (m- and p- mixture) (contains Ethylvinylbenzene, Diethylbenzene)

(stabilized with TBC)

Product code: D0958

For laboratory research purposes. Product use: Not for drug or household use. Restrictions on use:

Company: TCI America

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Emergency telephone number:

Chemical Emergencies:

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

+1-503-286-7624

Transportation Emergencies:

Chemtrec 24-Hour

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Responsible department:

TCI America

Environmental Health Safety and Security

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#### 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Skin Corrosion/Irritation [Category 2] WHMIS 2015:

Eye Damage/Irritation [Category 2A] Germ Cell Mutagenicity [Category 2] Toxic to Reproduction [Category 2]

Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Flammable Liquids [Category 4] Aquatic Hazard (Acute) [Category 2] Aquatic Hazard (Long-Term) [Category 2]

Signal word: Warning!

Hazard Statement(s): Combustible liquid

Causes skin irritation

Causes serious eye irritation

Suspected of causing genetic defects

Suspected of damaging fertility or the unborn child

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure: Liver Thymus Kidney

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. 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 or attention. If exposed or concerned: Get medical advice or attention. In case of fire: Use dry chemical, dry sand or foam to extinguish. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

[Storage]

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[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:

[HNOC]

May cause polymerization. May be harmful if swallowed.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Mixture

Components: Divinylbenzene (m- and p- mixture) (contains Ethylvinylbenzene, Diethylbenzene) (stabilized with TBC)

 Percent:
 >50.0%(GC)

 CAS RN:
 1321-74-0

 Molecular Weight:
 130.19

 Chemical Formula:
 C10H10

Hazardous ingredient(s): Divinylbenzene (57%) 1321-74-0

Ethylvinyl Benzene (40%) 28106-30-1 Diethylbenzene (3\$) 25340-17-4

Stabilizers: 4-tert-butylcatechol

# 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: Dizziness. Redness. Drowsiness.

**Delayed:** May cause heritable genetic damage in humans. May have effects on the respiratory tract.

#### Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

# 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media: Water (It may scatter and spread fire.)

Specific hazards arising from the

chemical:

This substance may polimerize explosively when heated or involved in a fire. Container may explode

when heated. Combat fire from a sheltered position.

Hazardous combustion products:

Other specific hazards:

These products include: Carbon 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:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off,

**Environmental precautions:** 

Methods and materials for containment

and cleaning up:

ventilation. 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.

Absorb spilled material in dry sand or inert absorbent before recovering it into a covered container. In

case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be

promptly disposed of, in accordance with appropriate laws and regulations.

Prevention of secondary hazards:

Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

#### 7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after

handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid all contact!

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a refrigerator.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive

Packaging material: Comply with laws.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** 

ACGIH TLV(TWA): 10 ppm

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed Appropriate engineering controls:

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

4 48

No data available

regulations.

Hand protection: Impervious gloves.

Eve 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): Liquid Form: Clear

Colour: Colorless - Yellow No data available Odour: Odor threshold: No data available Odour threshold: No data available

No data available Melting point/freezing point: No data available pH: Boiling point/range: 195°C (383°F) Vapour pressure: No data available.

No data available Vapour density: **Decomposition temperature: Dynamic Viscosity:** 

Relative density: 0.91

Kinematic viscosity: No data available

Log Pow: No data available

**Evaporation rate(Butyl** No data available Acetate=1):

68°C (154°F) Autoignition temperature: 500°C (932°F) Flash point:

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: 1.1% Upper: 6.2%

Solubility(ies):

[Water] No data available

[Other solvents] Soluble: Methanol

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Polymerization may occur under the influences of heat, light or on contact with polymerization initiators

such as peroxides etc.

Possibility of hazardous reactions: No special reactivity has been reported.

Conditions to avoid: Heat, Open flame, Light

Oxidizing agents, Acids, Peroxides, Metal salts Incompatible materials:

Hazardous decomposition products: Carbon dioxide, Carbon monoxide

#### 11. TOXICOLOGICAL INFORMATION

RTECS Number: CZ9370000

Acute Toxicity: orl-rat LD50:5 mL/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

Target organ(s):

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure: Liver Thymus Kidney

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

Fish: 48h LC50:3.45 mg/L (Oryzias latipes) 96h LC50:4.2 mg/L (Oryzias latipes)

Crustacea: 48h EC50:1.9 mg/L (Daphnia magna)

Algae: 72h EC50:1.7 mg/L (Selenastrum capricornutum)

Persistence / degradability: 0% (by BOD), 1% (m-), 3% (p-)(by GC)

Bioaccumulative potential(BCF): (m-)219 - 415 (conc. 25 ug/L), 264 - 433 (conc. 2.5 ug/L), (p-)206 - 402 (conc. 25 ug/L), 229 - 385

(conc. 2.5 ug/L)

Mobility in soil

Log Pow: 3.59
Soil adsorption (Koc): 1600 - 1700
Henry's Law (PaM ³/mol): 141.8

## 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:**Other considerations:
Dispose of as unused product. Do not re-use empty containers.
Observe all federal, state and local regulations when disposing of the substance.

#### 14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division:

UN3082 Environmentally hazardous substance, 9 Miscellaneous hazardous III

liquid, n.o.s material

IATA

UN number: Proper Shipping Name:
UN3082 Environmentally hazardous substance,

liquid, n.o.s

Class or Division: Packing Group:

**Packing Group:** 

9 Miscellaneous hazardous III

material

<u>IMDG</u>

UN UN3082 Proper Shipping Name:

numb Environmentally hazardous substance,

er: liquid, n.o.s

Class or Division: Packing Group:

9 Miscellaneous hazardous III

material

**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 Regulations**

# CERCLA Hazardous substance and Reportable Quantity: SARA 313: Not Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

MassachusettsListedNew JerseyListedPennsylvaniaListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating: HMIS Classification: Health: 2
Flammability: 2
Instability: 0

HMIS Classification: Health: 2
Flammability: 2
Flammability: 0

Physical: 0

International Inventories

**Canada: DSL** On DSL **EC-No:** 215-325-5

# 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.