

# TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: 2-Nitrobiphenyl

Product code: N0194

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

Company: TCI America

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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

# 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Acute Toxicity - Oral [Category 4]

Signal word: Warning!

Hazard Statement(s): Harmful if swallowed

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. [Response] If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth.

[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]

None.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance 2-Nitrobiphenyl Components: Percent: >98.0%(GC) CAS RN: 86-00-0 Molecular Weight: 199.21 **Chemical Formula:** C<sub>12</sub>H<sub>9</sub>NO<sub>2</sub>

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#### 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 if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation

or rash occurs: Get medical advice/attention.

Eye contact: 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/attention.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Symptoms/effects:

Acute: No data available

Delayed: No data available

#### Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.

Specific hazards arising from the

chemical:

Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Hazardous combustion products:

Other specific hazards:

These products include: Carbon oxides Nitrogen oxides Closed containers may explode from heat of a fire.

**Advice for firefighters:** Wear self-contained breathing apparatus if possible.

Combat fire from a sheltered position.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Environmental precautions:

Methods and materials for containment

and cleaning up:

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

Prevent product from entering drains.

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to

cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of

electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and face

before breaks and immediately after handling the product. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Be sure not to give the container unexpected impacts, such as falling down or falling off.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

system or local exhaust as possible so that workers should not be exposed directly. Also install safety

shower and eye bath.

Personal protective equipment

**Respiratory protection:** Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

**Eye protection:** Safety glasses. A face-shield, if the situation requires. **Skin and body protection:** Protective clothing. Protective boots, if the situation requires.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):

Form: Crystal - Lump

Colour: Very pale yellow - Yellow

Odour: Sweet

Odor threshold: No data available Odour threshold: No data available

Melting point/freezing point: 36°C (Freezing point) (97°F) No data available pH: Boiling point/range: 170°C /1.7kPa (338°F) Vapour pressure: No data available.

Decomposition temperature: No data available Vapour density:

No data available Relative density: Dynamic Viscosity: No data available Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl

Acetate=1):

No data available

180°C (356°F) Flash point: No data available Autoignition temperature:

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

No data available Lower: Upper: No data available

Solubility(ies):

[Water] Insoluble

[Other solvents] Soluble: Methanol, Acetone, Ethanol, Dimethylformamide(DMF), Glacial acetic acid

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: May explosively decompose on heating, shock, friction, etc.

Conditions to avoid: Heat, Shock, Friction Incompatible materials: Oxidizing agents

Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx) Hazardous decomposition products:

#### 11. TOXICOLOGICAL INFORMATION

RTECS Number: DV5530000

**Acute Toxicity:** 

orl-rat LD50:1230 mg/kg orl-rbt LD50:1580 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

mmo-mus-lym 110 umol/L (+S9) mmo-sat 20 ug/plate (-S9)

Carcinogenicity: No data available

> IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

No data available Target organ(s):

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#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: No data available Bioaccumulative potential(BCF): No data available

Mobility in soil

Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (PaM ³/mol): No data available

## 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. Consult an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. 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. 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

Disposal of container:

**DOT (US)**Non-hazardous for transportation.

**IATA** Non-hazardous for transportation.

**IMDG** Non-hazardous for transportation.

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

Other Information

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

**International Inventories** 

**EC-No**: 201-646-8

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## 16. OTHER INFORMATION

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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.