

SAFETY DATA SHEET per OSHA HazCom 2012

Revised Date: March 14, 2017

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product name: p-Terphenyl

Product Number: 03400

Product use: For laboratory research purposes

Restrictions on use: Not for drug or household use

Safety Sheet Supplier: Oakley, Inc.

4000 Luxottica Place Mason, OH 45040

USA

Telephone: (614) 492-5610

Emergency Phone: (614) 674-4846

E-mail address: info.exciton@luxotticaretail.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319

Specific target organ toxicity – single exposure (Category 3), Respiratory, H335

Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

Label elements

Pictogram



Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P261 Avoid breathing dust

P264 Wash skin thoroughly after handling

P271 Use only outdoors or in a wall-ventilated area

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

Lenses, if present and easy to do. Continue rinsing

P312 Call a POISON CENTER or doctor/ physician if you feel unwell

P332 + P313 If skin irritation occurs: Get medical advice / attention

Oakley, Inc. - p-Terphenyl

P362 Take off contaminated clothing and wash before reuse

P391 Collect spillage

P403 + P233 Store in a well-ventilated space. Keep container tightly closed

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 1,4-Diphenylbenzene

Formula: C18 H14 Molecular Weight: 230.30 gm/mol

CAS-No.: 92-94-4 EC-No.: 202-205-2

Hazardous components

1,2-Bis(2-methylphenyl)benzene Skin Irritant 2; Eye irritant 2A; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1;

H319, H315, H335, H410

4. FIRST AID MEASURES

General advice

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

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No further relevant information available

Indication of any immediate medical attention and special treatment needed

No further relevant information available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

p-Terphenyl, CASRN 92-94-4, 5 ppm = 5 mg/m3 USA NIOSH recommended exposure limit

5 mg/m3 USA ACGIH Threshold Limit Value (TLV)

Remarks: eye and upper respiratory tract irritation

Hygiene measures and engineering controls

Adequate ventilation and/or containment in accordance with good laboratory practices. Wash hands before breaks and at the end of the workday.

Personal protective equipment

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with impermeable 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

Eye / face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance Form: crystalline Color: colorless b) Odor No data available c) Odor Threshold No data available d) pH No data available 212-213 °C e) Melting point Initial boiling point and boiling range 389 °C f) 207 °C g) Flash point h) Evaporation rate No data available No data available i) Flammability j) Upper/lower flammability or explosive limits No data available k) Vapor pressure No data available Vapor density No data available No data available m) Relative density No data available n) Solubility o) Partition coefficient: n-octanol/water No data available p) Auto-ignition temperature No data available q) Decomposition temperature No data available

10. STABILITY AND REACTIVITY

No data available

a) Reactivity No data available

b) Chemical stability Stable under recommended storage conditions

c) Possibility of hazardous reactions
 d) Conditions to avoid (e.g. static discharge)
 e) Incompatible materials
 No data available
 Strong oxidizing agents

f) Hazardous decomposition products See Section 5.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

r) Viscosity

LD50 Oral (rat) > 10,000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

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.

Reproductive toxicity

No data available

Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Signs and Symptoms of Exposure

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: WZ6475000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

No data available.

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (p-Terphenyl)

Marine pollutant: Marine pollutant

IATA

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (p-Terphenyl)

Marine pollutant: Marine pollutant

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5 L for liquid or > 5 kg for solids.

15. REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

SARA 313: 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 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

p-Terphenyl CASRN 92-94-4

Pennsylvania Right To Know Components

p-Terphenyl CASRN 92-94-4

New Jersey Right To Know Components

p-Terphenyl CASRN 91-94-4

California Prop. 65 Components

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

16. OTHER INFORMATION

HMIS Rating

Health hazard: 2

Chronic Health Hazard:

Flammability: 1
Physical Hazard: 0

NFPA Rating

Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0

Further information

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