# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 4.0 Revision Date 07/27/2010 Print Date 03/21/2011

| 1. PRODUCT AND COMPANY IDENTIFICATION |   |  |  |  |
|---------------------------------------|---|--|--|--|
| Product name                          | : | 2-Propylphenyl isocyanate  |  |  |
| Product Number<br>Brand               | : | 487449<br>Aldrich  |  |  |
| Company                               | : | Sigma-Aldrich<br>3050 Spruce Street<br>SAINT LOUIS MO 63103<br>USA |  |  |
| Telephone<br>Fax<br>Emergency Phone # | : | +18003255832<br>+18003255052<br>(314) 776-6555                     |  |  |

## 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

# OSHA Hazards

Combustible Liquid, Irritant

Other hazards which do not result in classification Lachrymator.

## GHS Label elements, including precautionary statements

Pictogram



| Signal word   | Warning   |
|---|---|
| Hazard statement(s)<br>H227<br>H302 + H312<br>H315<br>H319<br>H332<br>H335  | Combustible liquid<br>Harmful if swallowed or in contact with skin.<br>Causes skin irritation.<br>Causes serious eye irritation.<br>Harmful if inhaled.<br>May cause respiratory irritation.  |
| Precautionary statement(s)<br>P261<br>P280<br>P305 + P351 + P338            | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.<br>Wear protective gloves/ protective clothing.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if<br>present and easy to do. Continue rinsing. |
| HMIS Classification<br>Health hazard:<br>Flammability:<br>Physical hazards: | 2<br>2<br>0   |
| NFPA Rating<br>Health hazard:<br>Fire:<br>Reactivity Hazard:                | 2<br>2<br>0   |
| Potential Health Effects  |   |
| Inhalation  | May be harmful if inhaled. Causes respiratory tract irritation.   |

| Skin      | May be harmful if absorbed through skin. Causes skin irritation. |
|-----------|--|
| Eyes      | Causes eye irritation.   |
| Ingestion | May be harmful if swallowed.                                     |

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Formula<br>Molecular Weight         | : C <sub>10</sub> H <sub>11</sub> NO<br>: 161.2 g/mol |           |               |
|-------------------------------------|---|-----------|---------------|
| CAS-No.                             | EC-No.  | Index-No. | Concentration |
| 2-Propylphenyl isocy<br>190774-57-3 | vanate  |           |               |

## 4. FIRST AID MEASURES

#### **General advice**

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

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Further information**

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

## **Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

## Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with 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.

#### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

| -  |                       |   |  |  |
|----|-----------------------|---|--|--|
|    | Form                  | liquid                                      |  |  |
|    | Colour                | colourless                                  |  |  |
| Sa | Safety data           |   |  |  |
|    | рН                    | no data available                           |  |  |
|    | Melting point         | no data available                           |  |  |
|    | Boiling point         | 50 °C (122 °F) at 0.1 hPa (0.1 mmHg) - lit. |  |  |
|    | Flash point           | 85 °C (185 °F) - closed cup                 |  |  |
|    | Ignition temperature  | no data available                           |  |  |
|    | Lower explosion limit | no data available                           |  |  |
|    | Upper explosion limit | no data available                           |  |  |
|    | Density               | 1.01 g/cm3 at 25 °C (77 °F)                 |  |  |
|    | Water solubility      | no data available                           |  |  |
|    |                       |   |  |  |

## **10. STABILITY AND REACTIVITY**

## **Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid** Avoid moisture. Heat, flames and sparks.

## Materials to avoid Strong oxidizing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

**Respiratory or skin sensitization** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

#### 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

Specific target organ toxicity - single exposure (Globally Harmonized System) Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System) no data available

# Aspiration hazard

no data available

## Potential health effects

| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation.  |
|------------|--|
| Ingestion  | May be harmful if swallowed.                                     |
| Skin       | May be harmful if absorbed through skin. Causes skin irritation. |
| Eyes       | Causes eye irritation.   |

#### Signs and Symptoms of Exposure

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **Additional Information**

## **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

no data available

## **13. DISPOSAL CONSIDERATIONS**

## Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

## DOT (US)

UN-Number: 2206 Class: 6.1 Packing group: III Proper shipping name: Isocyanates, toxic, n.o.s. (2-Propylphenyl isocyanate) Marine pollutant: No Poison Inhalation Hazard: No

## IMDG

UN-Number: 2206 Class: 6.1 Packing group: III EMS-No: F-A, S-A Proper shipping name: ISOCYANATES, TOXIC, N.O.S. (2-Propylphenyl isocyanate) Marine pollutant: No

## ΙΑΤΑ

UN-Number: 2206 Class: 6.1 Packing group: III Proper shipping name: Isocyanates, toxic, n.o.s. (2-Propylphenyl isocyanate)

## **15. REGULATORY INFORMATION**

## **OSHA Hazards**

Combustible Liquid, Irritant

## **DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

2-Propylphenyl isocyanate

## 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

Fire Hazard, Acute Health Hazard

## Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

2-Propylphenyl isocyanate

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## New Jersey Right To Know Components

2-Propylphenyl isocyanate

## 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**

## **Further information**

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