**SAFETY DATA SHEET**

Version 1.0

Date 06/19/2015

# PRODUCT AND COMPANY IDENTIFICATION

* 1. **Product identifiers**

Product name : Dioctyl phthalate

CAS-No. : 117-81-7

# Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Manufacture of substances

# Details of the supplier of the safety data sheet

Company : Solvents and Petroleum Service, Inc.

1405 Brewerton Rd

Syracuse, NY 13208

Telephone Fax

: 800-315-4467

: 315-454-8230

# Emergency telephone number

Emergency Phone # : Chemtrec 800-424-9300

# HAZARDS IDENTIFICATION

* 1. **Classification of the substance or mixture**

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

Reproductive toxicity (Category 1B), H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

# GHS Label elements, including precautionary statements

Pictogram  Signal word Danger

Hazard statement(s)

H360 May damage fertility or the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P405 Store locked up.

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

# Hazards not otherwise classified (HNOC) or not covered by GHS

Endocrine disrupting chemical(s)

# COMPOSITION/INFORMATION ON INGREDIENTS

* 1. **Substances**

Synonyms : Bis(2-ethylhexyl) phthalate

Phthalic acid bis(2-ethylhexyl ester)

Formula : C24H38O4

Molecular weight : 390.56 g/mol

CAS-No. : 117-81-7

EC-No. : 204-211-0

Index-No. : 607-317-00-9

Registration number : 01-2119484611-38-XXXX

# Hazardous components

|  |  |  |
| --- | --- | --- |
| Component | Classification | Concentration |
| **bis(2-Ethylhexyl) phthalate** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) |
|  | Repr. 1B; H360 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

# FIRST AID MEASURES

* 1. **Description of 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

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

# Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

# Indication of any immediate medical attention and special treatment needed

No data available

# FIREFIGHTING MEASURES

* 1. **Extinguishing media Suitable extinguishing media**

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

# Special hazards arising from the substance or mixture

Carbon oxides

# Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# Further information

No data available

# ACCIDENTAL RELEASE MEASURES

* 1. **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

# 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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

# Reference to other sections

For disposal see section 13.

# HANDLING AND STORAGE

* 1. **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.2.

# Conditions for safe storage, including any incompatibilities

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.

# Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# EXPOSURE CONTROLS/PERSONAL PROTECTION

* 1. **Control parameters**

**Components with workplace control parameters**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Component | CAS-No. | Value | Control parameters | Basis |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | TWA | 5.000000mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
|  | Remarks | Lower Respiratory Tract irritationConfirmed animal carcinogen with unknown relevance to humans |
|  |  | TWA | 5.000000mg/m3 | USA. NIOSH Recommended Exposure Limits |
|  |  | Potential Occupational Carcinogen See Appendix A |
|  |  | ST | 10.000000mg/m3 | USA. NIOSH Recommended Exposure Limits |
|  |  | Potential Occupational Carcinogen See Appendix A |
|  |  | TWA | 5.000000mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |

* 1. **Exposure controls**

**Appropriate engineering controls**

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

# Personal protective equipment 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).

# Skin 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm Break through time: 480 min

Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 230 min

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

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.

# 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.

# 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).

# Control of environmental exposure

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

# PHYSICAL AND CHEMICAL PROPERTIES

* 1. **Information on basic physical and chemical properties**
		1. Appearance Form: liquid
		2. Odor No data available
		3. Odor Threshold No data available
		4. pH No data available
		5. Melting point/freezing point
		6. Initial boiling point and boiling range

Melting point/range: -50 °C (-58 °F) - lit. 384 °C (723 °F) - lit.

* + 1. Flash point 207 °C (405 °F) - closed cup
		2. Evaporation rate No data available
		3. Flammability (solid, gas) No data available
		4. Upper/lower flammability or explosive limits

Lower explosion limit: 0.3 %(V)

* + 1. Vapor pressure 1.6 hPa (1.2 mmHg) at 93.0 °C (199.4 °F)
		2. Vapor density No data available
		3. Relative density 0.985 g/cm3 at 25 °C (77 °F)
		4. Water solubility insoluble
		5. Partition coefficient: n- octanol/water
		6. Auto-ignition temperature

No data available 390.0 °C (734.0 °F)

* + 1. Decomposition No data available

|  |  |  |
| --- | --- | --- |
|  | temperature |  |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

# Other safety information

No data available

# STABILITY AND REACTIVITY

* 1. **Reactivity**

No data available

# Chemical stability

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# Conditions to avoid

No data available

# Incompatible materials

Strong oxidizing agents

# Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

# TOXICOLOGICAL INFORMATION

* 1. **Information on toxicological effects Acute toxicity**

LD50 Oral - Rat - 30,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - 25,000 mg/kg No data available

# Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: Mild eye irritation - 24 h

**Respiratory or skin sensitisation** Maximisation Test (GPMT) - Guinea pig Result: Does not cause skin sensitisation. (OECD Test Guideline 406)

# Germ cell mutagenicity

No data available

# Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (bis(2-Ethylhexyl) phthalate)

NTP: Reasonably anticipated to be a human carcinogen (bis(2-Ethylhexyl) phthalate)

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

May cause congenital malformation in the fetus. Presumed human reproductive toxicant

May cause reproductive disorders.

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

# Aspiration hazard

No data available

# Additional Information

RTECS: TI0350000

Effects due to ingestion may include:, Gastrointestinal disturbance Kidney -

# ECOLOGICAL INFORMATION

* 1. **Toxicity**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 0.67 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - > 0.32 mg/l - 96 h

LC50 - Cyprinodon variegatus (sheepshead minnow) - > 0.17 mg/l - 96 h LC50 - Lepomis macrochirus (Bluegill) - > 0.20 mg/l - 96 h

NOEC - other fish - > 0.3 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - > 0.16 mg/l - 48 h

# Persistence and degradability

Biodegradability Result: - Readily biodegradable

(OECD Test Guideline 301)

# Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 100 d

- 0.014 mg/l

# Mobility in soil

No data available

Bioconcentration factor (BCF): 113 Remarks: Does not bioaccumulate.

# Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# Other adverse effects

No data available

# DISPOSAL CONSIDERATIONS

* 1. **Waste treatment methods Product**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

# TRANSPORT INFORMATION

**DOT (US)**

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (bis(2-Ethylhexyl) phthalate) Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

# IMDG

Not dangerous goods

# IATA

Not dangerous goods

# REGULATORY INFORMATION

**SARA 302 Components**

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

# SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

bis(2-Ethylhexyl) phthalate

# SARA 311/312 Hazards

Chronic Health Hazard

# Massachusetts Right To Know Components

bis(2-Ethylhexyl) phthalate

# Pennsylvania Right To Know Components

bis(2-Ethylhexyl) phthalate

# New Jersey Right To Know Components

bis(2-Ethylhexyl) phthalate

# California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

bis(2-Ethylhexyl) phthalate

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Revision Date 2007-07-01

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Revision Date 2007-07-01

Revision Date 2009-02-01

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

bis(2-Ethylhexyl) phthalate

CAS-No. 117-81-7

Revision Date 2009-02-01

# OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

H360 May damage fertility or the unborn child.

Repr. Reproductive toxicity

# HMIS Rating

|  |  |
| --- | --- |
| Health hazard:Chronic Health Hazard: Flammability: | 0\* 1 |
| Physical Hazard | 0 |
| **NFPA Rating**Health hazard: | 0 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |
| **Further information** |  |

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solvents and Petroleum Service, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.