

Diethyl Phthalate

SECTION 1. IDENTIFICATION

| | |
|--------------------------------------|--|
| Product Identifier | Diethyl Phthalate |
| Other Means of Identification | DEHP, Di-sec-octyl phthalate, di(2-ethylhexyl)phthalate |
| Product Code(s) | DI5710 |
| Product Family | Organic solution |
| Recommended Use | Laboratory and industrial use. |
| Restrictions on Use | None known. |
| Supplier Identifier | Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995 |
| Emergency Phone No. | CANUTEC CANADA, 613-996-6666, 24 Hours |
| SDS No. | 0390 |
| Date of Preparation | February 23, 2016 |

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Carcinogenicity - Category 1B; Reproductive toxicity - Category 1B

Label Elements



Signal Word:
Danger

Hazard Statement(s):

May cause cancer.
May damage fertility or the unborn child.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Do not get in eyes, on skin, or on clothing.
Wear protective gloves/protective clothing/eye protection/face protection.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Product Identifier: Diethyl Phthalate
Date of Preparation: February 23, 2016

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

| Chemical Name | CAS No. | % | Other Identifiers |
|---------------------------|----------|-----|------------------------------|
| Di(2-ethylhexyl)phthalate | 117-81-7 | >99 | DEHP, Di-sec-octyl phthalate |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Call a Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If exposed or concerned, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Do not induce vomiting. Rinse mouth with water. If exposed or concerned, get medical advice or attention.

First-aid Comments

All first aid procedures should be periodically reviewed by a doctor familiar with the material and its condition of use in the workplace.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice

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

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Use extreme caution. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Emergency responders: use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources if safe to do so.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Large spills or leaks: contact emergency services and manufacturer/supplier for advice.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Obtain special instructions before use. Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Do not get in eyes, on skin or on clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

Conditions for Safe Storage

Store in an area that is: dry, well-ventilated, secure and separate from work areas, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in the original, labelled, shipping container. Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Chemical Name | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---------------------------|------------|------|----------|---------|-----------|-----|
| | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Di(2-ethylhexyl)phthalate | 5 mg/m3 A3 | | 5 mg/m3 | | | |

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide safety shower in work area, if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, Viton®, Viton®/butyl rubber, Barrier® (PE/PA/PE), Silver Shield/4H® (PE/EVAL/PE), Tychem® BR/LV, Tychem® Responder, Tychem® TK.

The following materials should NOT be used: natural rubber, polyvinyl chloride.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge, wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|-----------------|-------------------------|
| Appearance | Colourless oily liquid. |
| Odour | Odourless |
| Odour Threshold | Not available |

Product Identifier: Dioctyl Phthalate

Date of Preparation: February 23, 2016

Page 03 of 06

| | |
|---|--|
| pH | Not available |
| Melting Point/Freezing Point | -55 °C (-67 °F) (melting); -55 °C (-67 °F) (freezing) |
| Initial Boiling Point/Range | 384 °C (723 °F) |
| Flash Point | 218.3 °C (424.9 °F) (closed cup) |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Will not burn. |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); 0.28% (lower) |
| Vapour Pressure | ~ 0 kPa (0 mm Hg) |
| Vapour Density (air = 1) | Not applicable |
| Relative Density (water = 1) | 0.985 at 20 °C |
| Solubility | Practically insoluble in water; Soluble in all proportions in common organic solvents. |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | 390 - 391 °C (734 - 736 °F) |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); 81.4 mPa.s (dynamic) |
| Other Information | |
| Physical State | Liquid |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Oxidizing agents (e.g. peroxides).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---------------------------|--|-------------------|------------------------|
| Di(2-ethylhexyl)phthalate | > 10620 mg/m ³ (rat) (4-hour exposure) | 30600 mg/kg (rat) | ~ 24500 mg/kg (rabbit) |

Skin Corrosion/Irritation

Animal tests show very mild irritation.

Serious Eye Damage/Irritation

Animal tests show very mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Ingestion

May cause a laxative effect. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

No information was located for respiratory sensitization. Not a skin sensitizer.

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---------------------------|-------------|---------------|------------------------|-------------|
| Di(2-ethylhexyl)phthalate | Group 2B | A3 | Reasonably anticipated | Carcinogen |

Key to Abbreviations

Group 2B = Possibly carcinogenic to humans.

A3 = Animal carcinogen.

Reproductive Toxicity

Development of Offspring

May harm the unborn child.

Sexual Function and Fertility

May cause effects on sexual function and/or fertility.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Product Identifier: Dioctyl Phthalate

Date of Preparation: February 23, 2016

Canada**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

USA**Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

| | | | |
|------------------------------|--|-------------------------|------------------------|
| NFPA Rating | Health - 1 | Flammability - 1 | Instability - 0 |
| SDS Prepared By | Alphachem Limited | | |
| Phone No. | (905)-821-2995 | | |
| Date of Preparation | February 23, 2016 | | |
| Date of Last Revision | March 21, 2016 | | |
| References | CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). | | |
| Disclaimer | This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein. | | |