

## Dioctyl Adipate

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Dioctyl Adipate
<b>Other Means of Identification</b>	Adipic acid bis(2-ethylhexyl) ester, DEHA, Hexanedioic acid dioctyl ester
<b>Product Code(s)</b>	DI5410
<b>Product Family</b>	Organic solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0653

### SECTION 2. HAZARD IDENTIFICATION

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

#### Classification

Skin irritation - Category 2; Eye irritation - Category 2

#### Label Elements



Signal Word:  
Warning

Causes skin irritation.  
Causes serious eye irritation.

#### Precautionary Statement(s):

Wash hands thoroughly after handling.

Wear eye protection/face protection.

Wear protective gloves.

#### Response:

IF ON SKIN: Wash with plenty of water.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: 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.

#### Storage:

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Store away from incompatible materials.

Disposal:

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

#### Other Hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Bis(2-ethylhexyl) adipate	103-23-1	> 98	Adipic acid bis(2-ethylhexyl) ester, DEHA, Hexanedioic acid dioctyl ester	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Remove source of exposure or move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

##### Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, 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

Rinse mouth with water. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Immediately call a Poison Centre or doctor.

##### First-aid Comments

Provide general supportive measures (comfort, warmth, rest).

Consult a doctor and/or the nearest Poison Control Centre for all exposures.

All first aid procedures should be periodically reviewed by a doctor familiar with the material and its conditions 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. Special "alcohol resistant fire-fighting foams".

##### Unsuitable Extinguishing Media

None known.

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### 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

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Move containers from fire area if it can be done without risk. Otherwise, use water in flooding quantities as a spray or fog to keep fire-exposed containers cool and absorb heat. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

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

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: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Large spills or leaks: dike spilled product to prevent runoff. Contain and soak up spill with absorbent that does not react with spilled product. Use non-combustible absorbent materials such as vermiculite, earth or sand to contain spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Avoid breathing in this product. Only use where there is adequate ventilation. Avoid release to the environment. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty. Wash hands thoroughly after handling this material.

### Conditions for Safe Storage

Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity), out of direct sunlight and away from heat and ignition sources. Store in the original, labelled, shipping container.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Bis(2-ethylhexyl) adipate	Not established		Not established			

NOTE: In many jurisdictions, exposure limits are similar to the ACGIH TLVs. Since a TLV has not been established for this substance, appropriate government agencies in each jurisdiction should be consulted to determine which regulations apply.

### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### Individual Protection Measures

#### Eye/Face Protection

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Wear chemical safety goggles and face shield when contact is possible.

#### **Skin Protection**

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

#### **Respiratory Protection**

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Basic Physical and Chemical Properties**

<b>Appearance</b>	Colourless oily liquid.
<b>Odour</b>	Not available
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Melting Point/Freezing Point</b>	-67.8 °C (-90.0 °F) (melting); -67.8 °C (-90.0 °F) (freezing)
<b>Initial Boiling Point/Range</b>	417 °C (783 °F)
<b>Flash Point</b>	196 °C (385 °F)
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	~ 0 kPa (0 mm Hg)
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	0.925 at 20 °C
<b>Solubility</b>	Practically insoluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	8.12 (estimated)
<b>Auto-ignition Temperature</b>	350 °C (662 °F)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); 13.7 mPa.s at 20 °C (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid

## **SECTION 10. STABILITY AND REACTIVITY**

### **Reactivity**

Not reactive under normal conditions of use.

### **Chemical Stability**

Normally stable.

### **Possibility of Hazardous Reactions**

None expected under normal conditions of storage and use.

### **Conditions to Avoid**

Incompatible materials.

### **Incompatible Materials**

Strong oxidizing agents (e.g. perchloric acid).

### **Hazardous Decomposition Products**

None known.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Bis(2-ethylhexyl) adipate	Not available	9110 mg/kg (rat)	8410 mg/kg (rabbit)

### Skin Corrosion/Irritation

Causes skin irritation.

### Serious Eye Damage/Irritation

Causes serious eye irritation.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

No information was located.

#### Ingestion

Expected to be a low ingestion hazard.

### Aspiration Hazard

No information was located.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

### Respiratory and/or Skin Sensitization

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

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Bis(2-ethylhexyl) adipate	Group 3	Not designated	Not Listed	Not Listed

Group 3 – Not classifiable as to its carcinogenicity to humans.

### Reproductive Toxicity

#### Development of Offspring

No information was located.

#### Sexual Function and Fertility

No information was located.

#### 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.

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## 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**

**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**            August 04, 2017

**Date of Last Revision**        August 04, 2017

**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.

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