



UNIVAR

Material Safety Data Sheet

LA1921
Dioctyl Phthalate

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA1921
Product Name: Dioctyl Phthalate
Synonyms: None
Chemical Family: None Known
Application: Plasticizer.

Distributed By:
Univar Canada Ltd.
9800 Van Home Way
Richmond, BC
V6X 1W5

Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.
Preparation date of MSDS: 23 October 2009
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2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | Percentage (w/w) | LD50s and LC50s Route & Species: |
|--|------------------|--|
| Di(2-ethylhexyl) phthalate 117-81-7 | 100 | Dermal LD50 (Rabbit) = 24500 mg/kg Oral LD50 (Rat) = 6860 mg/kg Inhalation LC50 (Rat) > 10.62 mg/L 4 h Inhalation LC50 (Rat) > 23.87 mg/L 1 h |

Note: No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact: Causes mild eye irritation.

Skin Contact: Causes mild skin irritation.

Inhalation: May cause irritation of the respiratory tract. Causes irritation of the mouth, nose and throat.

Ingestion: Harmful if swallowed. May result in irritation of the mouth and gastrointestinal tract. May cause central nervous system effects.

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4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Skin Contact: Wash with soap and water. If irritation persists or signs of toxicity occur, seek medical attention.
Inhalation: Move person to fresh air. If irritation persists or signs of toxicity occur, seek medical attention.
Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
Notes to Physician: Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE FIGHTING MEASURES

Flash Point: 216 °C / 420 °F
Flash Point Method: Cleveland Open Cup
Autoignition Temperature: 382°C / 719.6°F
Flammable Limits in Air (%): Not Available.
Extinguishing Media: Use DRY chemicals, CO2, alcohol foam or water spray.
Special Exposure Hazards: None expected.
Hazardous Decomposition/Combustion Materials (under fire conditions): Carbon monoxide. Carbon dioxide.
Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.
NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 1, FLAMMABILITY 1, INSTABILITY 0
HMIS RATINGS FOR THIS PRODUCT ARE: HEALTH 2, FLAMMABILITY 1, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.
Environmental Precautionary Measures: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Consult local authorities.
Procedure for Clean Up: Isolate hazard area and restrict access. Absorb with an inert dry material and place in an appropriate waste disposal container. Avoid direct contact with material.

7. HANDLING AND STORAGE

Handling: Avoid breathing mist or vapour. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage: Keep containers tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:
 Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels to an acceptable level.
Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied air respirator.
Gloves:
 Appropriate chemical resistant gloves should be worn.
Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.
Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

| Ingredients | Exposure Limit - ACGIH | Exposure Limit - OSHA | Immediately Dangerous to Life or Health - IDLH |
|----------------------------|-----------------------------|--|--|
| Di(2-ethylhexyl) phthalate | 5 mg/m ³ TLV-TWA | 5 mg/m ³ TWA 10 mg/m ³ STEL | 5000 mg/m ³ |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
 Colour: Colourless
 Odour: Slight
 pH: Not Available.
 Specific Gravity: 0.985
 Boiling Point: 384°C / 725°F
 Freezing/Melting Point: -50°C / -58°F
 Vapour Pressure: Not Available.
 Vapour Density: 13.5
 % Volatile by Volume: Not Available.
 Evaporation Rate: Negligible
 Solubility: 0.1 g/l
 VOCs: Not Available.
 Viscosity: 56.6 mPa.s (25 C)
 Molecular Weight: 390.66
 Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
 Hazardous Polymerization: Will not occur.
 Conditions to Avoid: None known.
 Materials to Avoid: Strong oxidizing agents.
 Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
 Additional Information:
 No additional remark.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Harmful if swallowed. May result in irritation of the mouth and gastrointestinal tract. May cause central nervous system effects.
Skin Contact: Causes mild skin irritation.
Inhalation: May cause irritation of the respiratory tract. Causes irritation of the mouth, nose and throat.
Eye Contact: Causes mild eye irritation.

Additional Information:

Acute Test of Product:
 Acute Oral LD50: Not Available.
 Acute Dermal LD50: Not Available.
 Acute Inhalation LC50: Not Available.

Carcinogenicity:

| Ingredients | IARC - Carcinogens | ACGIH - Carcinogens |
|----------------------------|--------------------|---------------------|
| Di(2-ethylhexyl) phthalate | Group 3 | A3 |

Carcinogenicity Comment: DEHP was administered to rats and mice in a lifetime bioassay sponsored by the U.S. National Toxicology Program (NTP). High feed concentrations (mice: 3000 and 6000 ppm; rats: 6000 and 12,000 ppm) were used because of the very low toxicity of DEHP. Liver tumors were produced at both dose levels in each species. Further studies have shown that the liver tumors probably arose from the ability of DEHP at high doses in rodents to perturb lipid metabolism, to proliferate peroxisomes, or to increase the rate of cell division. Since non-rodent species (including primates) have been shown to be very resistant to these effects, and since DEHP is not genotoxic, DEHP probably presents a negligible carcinogenic risk to humans at exposure levels typical of occupational or consumer use. Oral doses of this material that were high enough to cause toxicity in pregnant animals also produced some minor abnormalities in their offspring. High oral doses of this material given to male animals produced reduced fertility. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure. Because this material does not evaporate readily and is not easily absorbed through human skin, it is not expected to produce such effects in humans through inhalation or skin exposure when handled in a manner consistent with the precautionary measures contained in this material safety data sheet.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Not Available.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

| Ingredients | Ecotoxicity - Fish Species Data | Acute Crustaceans Toxicity: | Ecotoxicity - Freshwater Algae Data |
|----------------------------|---|-----------------------------|--|
| Di(2-ethylhexyl) phthalate | LC50 96 h (Pimephales promelas) >0.27-0.67 mg/L flow-through LC50 96 h (Pimephales promelas) >0.16 mg/L static LC50 96 h (Oncorhynchus mykiss) >100 mg/L static LC50 96 h (Oncorhynchus mykiss) >0.32 mg/L flow-through LC50 96 h (Lepomis macrochirus) >0.200 mg/L static LC50 96 h (Lepomis macrochirus) >0.200 mg/L flow-through LC50 96 h (Oryzias latipes) >0.32 mg/L semi-static LC50 96 h (Oryzias latipes) >0.67 mg/L flow-through LC50 96 h (Brachydanio rerio) >0.32 mg/L semi-static LC50 96 h (Poecilia reticulata) >0.32 mg/L semi-static | Not Available. | EC50 72 h Desmodesmus subspicatus >130 mg/L EC50 96 h Pseudokirchneriella subcapitata >0.1 mg/L EC50 96 h Pseudokirchneriella subcapitata >0.1 mg/L static |

Other Information:
No additional remark.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

14. TRANSPORT INFORMATION

DOT Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(BIS(2-ETHYLHEXYL)PHTHALATE)
 DOT Hazardous Class 9
 DOT UN Number: UN3082
 DOT Packing Group: III
 DOT Reportable Quantity (lbs): 45.4 kg

Note: This product is regulated for transportation because it contains a reportable quantity of a hazardous substance found in Appendix A - 49 CFR 172.101. Depending on the amount of the hazardous substance present, certain package sizes may be exempt from the transportation regulations.

Marine Pollutant: No.

TDG (Canada):

TDG Shipping Name: Not Regulated.

Hazard Class: Not Applicable.

UN Number: Not Applicable.

Packing Group: Not Applicable.

Note: No additional remark.

Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Note: Not available.

U.S. Regulatory Rules

| Ingredients | CERCLA/SARA - Section 302: | SARA (311, 312) Hazard Class: | CERCLA/SARA - Section 313: |
|----------------------------|----------------------------|-------------------------------|----------------------------|
| Di(2-ethylhexyl) phthalate | Not Listed. | Listed | Listed |

California Proposition 65: Listed.

MA Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class:

D2A VERY TOXIC MATERIALS



16. OTHER INFORMATION**Additional Information:**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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*****END OF MSDS*****