

# 8-OIL

## Material Safety Data Sheet

Revision Date May 2007

For Chemical Emergency Call Chemtrec 800-424-9300

- 1. Substance/Company Identification**      PRODUCT NAME:      **8-OIL**  
CAS NUMBER: 000117-81-7  
MANUFACTURER:      Inland Vacuum Industries  
Churchville NY 14428  
(585) 293-3330
- 2. Composition/ Ingredients**      GENERIC NAME: 1,2-benzenedicarboxylic acid, bis(2-ethylhexyl) ester  
CHEMICAL FORMULA: C<sub>24</sub>H<sub>38</sub>O<sub>4</sub>
- 3. Hazards Identification**      WARNING-possible cancer hazard - may cause cancer.Based on animal data.  
HMIS Hazard Ratings: Health-2, Flammability-1, Chemical Reactivity-0  
NFPA Hazard Ratings: Health-0, Flammability-1, Instability-0  
NOTE: HMIS and NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.
- 4. First Aid Measures**      INHALATION: If symptomatic, move to fresh air. Get medical attention if symptoms persist.  
SKIN: Wash affected areas with soap and water. Seek medical attention if symptoms exist. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.  
EYES: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms persist.  
INGESTION: Contact a physician!
- 5. Fire Fighting Measures**      FLASH POINT: >216 C  
LOWER EXPLOSION LIMIT: .31vol.%@256C UPPER: N/A  
METHOD USED: Cleveland Open Cup  
EXTINGUISHING MEDIA: Water fog, dry chemical or carbon dioxide. NFPA Class II B Material.  
SPECIAL FIREFIGHTING PROCEDURES: Wear approved self-contained breathing apparatus and protective clothing. Use water spray to cool fire-exposed containers.  
UNUSUAL FIRE AND/OR EXPLOSION HAZARDS: None
- 6. Accidental Release Measures**      PROCEDURE TO BE FOLLOWED IN EVENT OF RELEASE: Dike and contain spill with inert material(sand, earth, etc.) and transfer liquid and solid diking material to separate containers for recovery or disposal. Wash floor area with water and soap. Remove contaminated clothing and wash before reuse. Wash affected skin areas with soap and water. Keep spill out of all sewers and open bodies of water.

**7. Handling and Storage**

**HANDLING:** Avoid breathing mist or vapor at concentrations greater than the exposure limits. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash Thoroughly after handling.  
**STORAGE:** Keep from contact with oxidizing materials. Containers should be

**8. Exposure Controls/Personal Protection**

**EXPOSURE LIMITS:** ACGIH TLV - 5mg/m<sup>3</sup>, 10mg/m<sup>3</sup> STEL  
**VENTILATION:** Good general ventilation (~10 air changes /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 below recommended exposure limits. Wear a respirator(HEPA) if engineering controls do not maintain airborne concentrations below recommended exposure limits.  
**EYE PROTECTION:** Safety glasses with side shields  
**SKIN PROTECTION:** Wear chemical-resistant gloves, boots, and protective clothing appropriate for the risk of exposure.  
**DECONTAMINATION FACILITIES:** Eye bath, safety shower, washing facilities.

**9. Physical & Chemical Properties**

**PHYSICAL STATE:** Liquid  
**AUTOIGNITION TEMPERATURE:** 382C  
**VAPOR PRESSURE @20C:** 7 x 10<sup>-8</sup> torr  
**BOILING POINT:** 384C  
**EVAPORATION RATE:** negligible  
**VAPOR DENSITY(air=1):** 13.5  
**WT % VOLATILES:** Nil  
**SPECIFIC GRAVITY:** 0.985  
**VISCOSITY:** 27 cst @ 40 C  
**SOLUBILITY IN WATER:** 0..34 mg/L  
**APPEARANCE:** Colorless liquid with a faint odor.

**10. Stability & Reactivity**

**STABILITY:** Material is stable under normal conditions  
**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizers  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Will not occur under normal circumstances.

**11. Toxicological Information**

**EFFECTS OF OVEREXPOSURE:** Oral doses of this material that were high enough to cause toxicity in pregnant animals also produced birth defects 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 the 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.

<b>ACUTE ORAL LD-50(G/KG):</b> Rat 30.6 Rabbit 33.9	<b>ACUTE DERMAL LD-50(G/KG):</b> Rabbits >2
<b>PRIMARY OCULAR IRRITANCY:</b> Rabbits-not an irritant	<b>DERMAL LD-50:</b> Rabbits - >20mL/kg
<b>SKIN IRRITATION(RABBIT):</b> Slight	<b>SKIN IRRITATION(HUMAN):</b> None
<b>SKIN SENSITIZATION(HUMAN):</b> None	<b>EYE IRRITATION(RABBIT):</b> Slight
<b>UNSCHEDULED DNA SYNTHESIS:</b> Negative	<b>IN VIVO DNA BINDING(RAT):</b> Negative

**INHALATION:** Possible cancer hazard. May cause cancer based on animal data.  
**EYES:** Low hazard for usual industrial handling or commercial handling by trained personnel.  
**SKIN:** Possible cancer hazard. May cause cancer based on animal data.  
**CARCINOGENICITY DATA:** DEHP was administered to rats and mice in a lifetime bioassay sponsored by the US National Toxicology Program. High feed concentrations(mice: 3000 and 600 ppm; rats: 6000 and 12000 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 human at exposure levels typical of occupational or consumer use.

**DEVELOPMENTAL TOXICITY DATA:** Definitions for the following section(s): LOEL = lowest-observed effect level, NOAEL = no observed-adverse-effect level, NOEL = no-observed-effect level.

ORAL STUDY(RAT): LOEL for maternal toxicity = 670mg/kg/day, NOEL for maternal toxicity = 360 mg/kg/day, LOEL for embryo/fetotoxicity = 670 mg/kg/day, NOEL for developmental toxicity = 360 mg/kg/day

ORAL STUDY(MOUSE): LOEL for teratogenicity = 90 mg/kg/day, NOEL for developmental toxicity = 45 mg/kg/day.

ORAL STUDY(MOUSE): LOEL for embryo/fetotoxicity = 190 mg/kg/day, NOEL for developmental toxicity = 70 mg.kg.day.

INHALATION STUDY(MOUSE): NOEL for developmental toxicity = 0.3 mg/l(highest concentration tested), LOEL for maternal toxicity = 0.3 mg/l(highest concentration tested, LOEL for maternal toxicity = 0.3 mg/l, NOEL for maternal toxicity = 0.05 mg/l.

REPRODUCTIVE TOXICITY DATA: Oral study(mouse): LOEL for maternal/paternal fertility = 0.1 % in diet, NOEL for maternal/paternal fertility = 0.01% in diet.

DERMAL ABSORPTION RATE(HUMAN, IN VITRO): 0.0001 MG/CM<sup>2</sup>/HOUR

## 12. Ecological Information

**INTRODUCTION:** This environmental effects summary is written to assist in addressing emergencies created by an accidental spill which might occur during the shipment of this material, and, in general, it is not meant to address discharges to sanitary sewers or publicly owned treatment works. Data for this material have been used to estimate its environmental impact. It has the following properties: a low biochemical oxygen demand and little potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial respiration. The subject product is expected to biodegrade and is not expected to persist for long periods in an aquatic environment. The direct instantaneous discharge to a receiving body of water of an amount of this chemical which will rapidly produce, by dilution, a final concentration of 0.32 mg/l or less is not expected to cause adverse environmental effects.

OXYGEN DEMAND DATA: BOD-5: 0.04 g oxygen/g ThOD: 2.58 g oxygen/g DEFINITIONS; NOEC = no-observed effect concentration, LOEC= lowers-observed-effect concentration, MSTC=maximum acceptable toxicant concentration.

ACUTE AQUATIC EFFECTS DATA: 96-H LD-50 [(FATHEAD MINNOW): >0.67 mg/L, NOEC: 0.67 mg/L (RAINBOW TROUT): >0.32 mg/L, NOEC: 0.32 mg/L (BLUEGILL SUNFISH): >0.32 mg/L, NOEC 0.32 mg/L, NOEC 0.32mg/L, (DAPHNID): >0.32 mg/L, NOEC: 0.32 mg/L (limit of solubility in fresh Water)] (SHEEPSHEAD MINNOW): >0.17 mg/L, NOEC: 0.17 mg/L (limit of solubility in sea water)

BIOCONCENTRATION FACTOR: rainbow trout: 42-113, bluegill sunfish: 114, fathead minnow: 155-886

## 13. Disposal Considerations

Incinerate liquid in approved equipment. Landfill contaminated diking material in accordance with Federal, State and local regulations. Contacting a waste disposal service is recommended. Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport Classification

DOT(USA) STATUS: Net quantities less than 45.4 kg (100 lbs) are not regulated; The following requirements apply to larger quantities: **Class 9 packing group III**. DOT reportable quantity is 100 lbs.(45.4 Kg). TDG(Canada): Not regulated, ICAO same as DOT, IMDG same as DOT

## 15. Regulatory Information

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. OSHA hazardous chemical(s): di(2-ethylhexyl) phthalate. CALIFORNIA PROPOSITION 65: (Safe Drinking Water and Toxic Enforcement Act of 1986): material(S) known to the State to cause cancer: di(2-ethylhexyl) phthalate, MASSACHUSETTS SUBSTANCE LIST: di(2-ethylhexyl) phthalate, NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST: di(2-ethylhexyl) phthalate, PENNSYLVANIA HAZARDOUS SUBSTANCE LIST: di(2-ethylhexyl) phthalate, THIS DOCUMENT HAD BEEN PREPARED IN ACCORDANCE WITH THE MSDS REQUIREMENTS OF THE WHMIS CONTROLLED PRODUCTS REGULATION. WHMIS(CANADA) INGREDIENT DISCLOSURE LIST: di(2-

ethylhexyl) phthalate, WHMIS CONTROLLED MATERIALS: di(2-ethylhexyl) phthalate, WHMIS HAZARD CLASSIFICATION: D/2/A, WHMISSTATUS: controlled.

CARCINOGENICITY CLASSIFICATION(COMPONENTS PRESENT AS 0.1% OR MORE): International Agency for Research on Cancer: 2B-possibly carcinogenic to humans; American Conference of Governmental Industrial Hygienists: A3-animal carcinogen: NATIONAL TOXICOLOGY PROGRAM: reasonably anticipated to be a carcinogen, OCCUPATION SAFETY AND HEALTH ADMINISTRATION: not listed ,Chemical(s) subject to the reporting requirements of Section 313 or Title III of the SARA of 1986 and 40 CFR part 372: di(2-ethylhexyl) phthalate, SARA(USA): Sections 311&312hazard classification(s): delayed (chronic health hazard, US TSCA: This product is listed on the TSCA inventory. Any impurities present in this product require export notification: di(2-ethylhexyl) phthalate, CAS#

000117-81-7; 2-ethylhexanol, CAS# 000104-76-7. Listed on the following chemical control lists, CEPA, DSL, EINECS, AICS, NICNAS AND The Japanese Handbook of Existing and New Chemical Substances.

**16. Other Information**

LABEL STATEMENTS: WARNING! POSSIBLE CANCER HAZARD -  
MAY CAUSE CANCER BASED ON ANIMAL DATA!

Avoid breathing mist or vapor, avoid contact with eyes, skin, and clothing, keep container closed, use only with adequate ventilation, wash thoroughly after handling.

FIRST AID: If inhaled, move to fresh air. Treat symptomatically. Get medical attention if symptoms persist. In case of eye contact, immediately flush eyes with plenty of water for at least 1 minutes Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. Get medical attention if symptoms persist. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes.

WARNING: This product contains a chemical known to the state of California to cause cancer.

CAUTION: For manufacturing, processing or repackaging by trained personnel only.

**NFPA RATING**

FLAMMABILITY	1
HEALTH HAZARD	0
REACTIVITY	0
SPECIAL HAZARD	MAY CAUSE CANCER