

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

**Product name:** Eastman(TM) DOP Plasticizer

**Product No.:** EAN 904099. 00401-00, P0040101, P0040100, E0040101, P0040107, P0040108, P0040109, E0040102

**Synonyms, Trade Names:** 00401-00

### Additional identification

**Chemical name:** di(2-ethylhexyl)phthalate  
**CAS-No.:** 117-81-7

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

**Identified uses:** Plasticizer

**Uses advised against:** None known.

### Details of the supplier of the safety data sheet

#### Manufacturer / Supplier

Eastman Chemical Company  
200 South Wilcox Drive  
Kingsport, TN 37660-5280 US  
+14232292000

Visit our website at [www.EASTMAN.com](http://www.EASTMAN.com) or email [emnmsds@eastman.com](mailto:emnmsds@eastman.com)

### Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

## SECTION 2: Hazards identification

### Hazard Classification:

#### Health Hazards

Toxic for Reproduction	Category 1B
Carcinogenicity	Category 2

**OSHA Specified Hazards:** not applicable

### Warning label items including precautionary statement:

**Pictogram:**



<b>Signal Words:</b>	DANGER!
<b>Hazard Statement(s):</b>	H360FD: May damage fertility. May damage the unborn child. H351: Suspected of causing cancer.
<b>Precautionary Statement:</b>	
<b>Prevention:</b>	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P280: Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response:</b>	P308+P313: IF exposed or concerned: Get medical advice/attention.
<b>Storage:</b>	P405: Store locked up.
<b>Disposal:</b>	P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None known.

### SECTION 3: Composition/information on ingredients

#### Substances / Mixtures

##### General information:

Chemical name	Concentration	Additional identification	Notes
bis(2-ethylhexyl) phthalate	100%	CAS-No.: 117-81-7	#

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

### SECTION 4: First aid measures

#### Description of first aid measures

<b>Inhalation:</b>	Move to fresh air. Treat symptomatically. Get medical attention.
<b>Eye contact:</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.
<b>Skin contact:</b>	Wash with soap and water. Get medical attention if symptoms occur.
<b>Ingestion:</b>	Seek medical advice.

**Most important symptoms and effects, both acute and delayed:** Symptoms may be delayed.

**Indication of any immediate medical attention and special treatment needed**

**Hazards:** None known.

**Treatment:** Treat symptomatically.

**SECTION 5: Firefighting measures**

**General Fire Hazards:** None known.

**Extinguishing media**

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide. Foam.

**Unsuitable extinguishing media:** None known.

**Special hazards arising from the substance or mixture:** None known.

**Advice for firefighters**

**Special fire fighting procedures:** None known.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Wear appropriate personal protective equipment.

**Environmental Precautions:** Avoid release to the environment.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**SECTION 7: Handling and storage:**

**Precautions for safe handling:** Do not taste or swallow. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Keep container closed. Keep away from food, drink and animal feeding stuffs.

Specific end use(s): Plasticizer

**SECTION 8: Exposure controls/personal protection****Control Parameters****Occupational Exposure Limits**

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	type	Exposure Limit Values	Source
di(2-ethylhexyl) phthalate (DEHP)	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (01 2010)
	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

**Exposure controls****Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**General information:** Eye bath. Washing facilities.

**Eye/face protection:** It is a good industrial hygiene practice to minimize eye contact.

**Skin protection**

**Hand Protection:** It is a good industrial hygiene practice to minimize skin contact.

**Other:** No data available.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices.

**Environmental Controls:** No data available.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Slight
<b>Odor Threshold:</b>	
<b>pH:</b>	No data available.
<b>Freezing Point:</b>	-50 °C
<b>Boiling Point:</b>	384 °C
<b>Flash Point:</b>	216 °C (Cleveland open cup)
<b>Evaporation Rate:</b>	Not determined.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%)-:</b>	No data available.
<b>Flammability Limit - Lower (%)-:</b>	No data available.
<b>Vapor pressure:</b>	0.0000001 mbar (20 °C)
<b>Vapor density (air=1):</b>	13.5
<b>Specific Gravity:</b>	0.985 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	0.1 g/l
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Pow: 75,858 log Pow: 4.88
<b>Autoignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	> 393 °C (DTA) No exotherm
<b>Dynamic viscosity:</b>	56.6 mPa.s (25 °C)
<b>Kinematic viscosity:</b>	57.46 mm <sup>2</sup> /s (25 °C)
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

**Other information**

<b>Minimum ignition temperature:</b>	382 °C (ASTM D2155)
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**SECTION 10: Stability and reactivity**

<b>Reactivity:</b>	None known.
<b>Chemical Stability:</b>	Stable
<b>Possibility of Hazardous Reactions:</b>	None known.
<b>Conditions to Avoid:</b>	None at ambient temperatures.
<b>Incompatible Materials:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Carbon Dioxide. Carbon Monoxide.

**SECTION 11: Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	None known.
<b>Ingestion:</b>	None known.
<b>Skin contact:</b>	None known.
<b>Eye contact:</b>	None known.

### Information on toxicological effects

#### Oral

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	Oral LD-50: (Rat): > 5,000 mg/kg

#### Dermal

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	Dermal LD-50: (Rabbit): 19,800 mg/kg

#### Inhalation

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	LC50 (Rat, 4 h): > 10.62 mg/l (highest concentration tested) no deaths from exposure to nearly saturated vapor

#### Repeated dose toxicity

<b>Product:</b>	No data available.
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#### Skin Corrosion/Irritation

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	(Rabbit, 24 h): slight

#### Serious Eye Damage/Eye Irritation

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	(Rabbit): none

#### Respiratory or Skin Sensitization

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	Skin Sensitization: (Guinea Pig): none

#### Carcinogenicity

<b>Product:</b>	No data available.
<b>Specified substance(s):</b> bis(2-ethylhexyl) phthalate	IARC 2B: possibly carcinogenic to humans. NTP reasonably anticipated to be a carcinogen. OSHA Not Listed.

**Toxicity to reproduction****Product:** No data available.**Developmental toxicity****Product:** No data available.**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:** No data available.**SECTION 12: Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**

bis(2-ethylhexyl) phthalate  
LC-50 (Fathead Minnow, 96 h): > 0.67 mg/l (limit of solubility in fresh water)  
NOEC: (Fathead Minnow, 96 h): > 0.67 mg/l (limit of solubility in fresh water)  
LC-50 (Rainbow Trout, 96 h): > 0.32 mg/l (limit of solubility in fresh water)  
NOEC: (Rainbow Trout, 96 h): > 0.32 mg/l (limit of solubility in fresh water)  
LC-50 (Sheepshead Minnow, 96 h): > 0.17 mg/l (limit of solubility in fresh water)

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

bis(2-ethylhexyl) phthalate  
LC-50 (Water Flea, 96 h): > 0.16 mg/l (limit of solubility in fresh water)  
NOEC: (Water Flea, 96 h): > 0.16 mg/l (limit of solubility in fresh water)

**Chronic hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Specified substance(s):**

bis(2-ethylhexyl) phthalate EC-50 (Selenastrum capricornutum, 96 h): > 0.10 mg/l

**Persistence and Degradability****Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential****Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** Log Kow: 4.88

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

**SECTION 13: Disposal considerations****Waste treatment methods**

**General information:** No data available.

**Disposal methods:** Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**SECTION 14: Transport information**

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

**DOT**

Class 9, Packing Group III when material is shipped in quantities in one package at or above the Reportable Quantity and when no other hazard class applies; otherwise, not regulated.

Reportable Quantity: 45.4 kg (bis(2-ethylhexyl) phthalate)  
Possible Shipping Description(s):

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (bis(2-ethylhexyl) phthalate) 9 III

**IMDG - International Maritime Dangerous Goods Code**

Class not regulated

Possible Shipping Description(s):

not regulated

**IATA**

Class not regulated

Possible Shipping Description(s):

not regulated

**SECTION 15: Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture.:**

**This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.**

**WHMIS (Canada) Status:** controlled

**WHMIS (Canada) Hazard Classification:** D/2/A

**SARA 311-312 Hazard Classification(s):**

immediate (acute) health hazard

delayed (chronic) health hazard

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical List**

DI(2-ETHYLHEXYL) PHTHALATE

**OSHA:** hazardous

**TSCA (US Toxic Substances Control Act):** This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

**DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act):** This product is listed on the DSL. Any impurities present in this product are exempt from listing.

**AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):** This product is listed on AICS or otherwise complies with NICNAS.

**MITI (Japanese Handbook of Existing and New Chemical Substances):** This product is listed in the Handbook or has been approved in Japan by new substance notification.

**Inventory of Existing Chemical Substances in China:** All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

## SECTION 16: Other information

**HMIS® Hazard Ratings:** Health - 1\*, Flammability - 1, Chemical Reactivity - 0

*HMIS® rating involves data 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.*

**Revision Information:** Not relevant.

**Key literature references and sources for data:** No data available.

**Training information:** No data available.

**Issue Date:** 05/22/2015

**SDS No.:**

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.