

acc. to OSHA HCS

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Reviewed on 02/01/2016

1 Identification

Product identifier

Trade name: Dioctyl Phthalate

CAS Number: 117-81-7
EC number: 204-211-0
Index number: 607-317-00-9

Application of the substance / the mixture

Dioctyl Phthalate (DOP) is a plasticizer used in the production of flexible polyvinyl chloride (PVC) plastic. DOP is a general-purpose plasticizer and long-time industry standard. Known for its good stability to heat and ultraviolet light, DOP shows a broad range of compatibility for use with PVC resins.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Supplier:

Maharashtra Aldehydes & Chemicals Ltd.

3rd Floor, Chandramukhi,

Nariman Point, Mumbai Maharashtra 400021 India

Tel: +91-022-49104444/21/22851316

Fax: +91-22-22853752 Email: info@macl.co.in

Information department: Email: info@macl.co.in

Emergency telephone number: +91-022-49104444/ 21 / 22851316

2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 1B H360 May damage fertility or the unborn child.

Label elements

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word Danger

Hazard statements

Suspected of causing cancer.

May damage fertility or the unborn child.

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Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

Classification system: NFPA ratings (scale 0 - 4)



Health = 0Fire = 1Reactivity = 0

HMIS-ratings (scale 0 - 4)



*0 Health = *0Fire = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description

117-81-7 bis(2-ethylhexyl) phthalate

Identification number(s) EC number: 204-211-0 **Index number:** 607-317-00-9

4 First-aid measures

Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints. **After skin contact:** Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.



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5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

117-81-7 bis(2-ethylhexyl) phthalate

PEL Long-term value: 5 mg/m³
REL Short-term value: 10 mg/m³
Long-term value: 5 mg/m³
See Pocket Guide App. A
TLV Long-term value: 5 mg/m³

Additional information: The lists that were valid during the creation were used as basis.

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Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

Store protective clothing separately. **Breathing equipment:** Not required.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

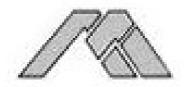
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

| Information on basic physical and General Information | chemical properties | |
|---|--------------------------------------|--|
| Appearance: | | |
| Form: | Fluid | |
| Color: | Colorless | |
| Odor: | Odorless | |
| Odour threshold: | Not determined. | |
| pH-value (- g/l): | neutral | |
| Change in condition | | |
| Melting point/Melting range: | -46 °C (-51 °F) | |
| Boiling point/Boiling range: | 7mbar/230-233 °C (45mbar/446-451 °F) | |
| Flash point: | 200 °C (392 °F) | |
| Flammability (solid, gaseous): | Not applicable. | |
| Ignition temperature: | 370 °C (698 °F) | |
| Decomposition temperature: | Not determined. | |
| Auto igniting: | Not determined. | |

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|--|---|-----------------|
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | 0.15 Vol % | |
| Upper: | 0.18 Vol % | |
| Vapor pressure at 20 $^{\circ}$ C (68 $^{\circ}$ F): | <0.001 hPa (<0 mm Hg) | |
| Density at 20 °C (68 °F): | 0.983 g/cm³ (8.203 lbs/gal) | |
| Relative density | Not determined. | |
| Vapour density | Not determined. | |
| Evaporation rate | Not determined. | |
| Solubility in / Miscibility with | | |
| Water at 20 $^{\circ}$ C (68 $^{\circ}$ F): | <0.1 g/l | |
| Partition coefficient (n-octanol/water | er): Not determined. | |
| Viscosity: | | |
| Dynamic at 20 °C (68 °F): | 77-82 mPas | |
| Kinematic: | Not determined. | |
| Other information | No further relevant information available. | |

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral LD50 30600 mg/kg (rat)

Dermal LD50 25000 mg/kg (rabbit)

Primary irritant effect: on the skin: Slight (Rabbit) on the eye: Slight (Rabbit)

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

117-81-7 bis(2-ethylhexyl) phthalate: 2B

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NTP (National Toxicology Program)

117-81-7 bis(2-ethylhexyl) phthalate: R

OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

| UN-Number | | |
|----------------------------|---|--|
| DOT | UN3082 | |
| ADN, IMDG, IATA | not regulated | |
| UN proper shipping name | | |
| ADN, IMDG, IATA | not regulated | |
| Transport hazard class(es) | | |
| DOT | | |
| Class | 9 Miscellaneous dangerous substances and articles | |
| ADN/R Class: | not regulated | |
| Packing group | | |
| DOT | III | |

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| not regulated | |
| Not applicable. | |
| Not applicable. | |
| II of Not applicable. | |
| | |
| | |
| 100 lbs, 45.4 kg | |
| not regulated | |
| | Not applicable. Not applicable. II of Not applicable. 100 lbs, 45.4 kg |

15 Regulatory information

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

Sara

Section 355 (extremely hazardous substances): Substance is not listed. Section 313 (Specific toxic chemical listings): Substance is listed.

TSCA (Toxic Substances Control Act): Substance is listed.

Proposition 65

Chemicals known to cause cancer: Substance is listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed. Chemicals known to cause reproductive toxicity for males: Substance is listed.

Chemicals known to cause developmental toxicity: Substance is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

117-81-7 bis(2-ethylhexyl) phthalate: B2

TLV (Threshold Limit Value established by ACGIH)

117-81-7 bis(2-ethylhexyl) phthalate: A3

NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is listed.

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word Danger

Hazard statements

Suspected of causing cancer.

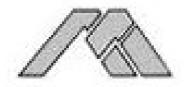
May damage fertility or the unborn child.

Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

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Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Contact: $+91-022-49104444/\ 21/\ 22851316)$ Date of preparation / last revision 02/02/2016/ -

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 1B: Reproductive toxicity, Hazard Category 1B

Sources

Primary irritant effect & Section 14 data taken from EASTMAN MSDS: Revision Date: 01/04/2008

MSDSUSA/ANSI/EN/150000001060/Version 8.0

US ·