TCI EUROPE N.V.

# SAFETY DATA SHEET

*According to 1907/2006/EC, Article 31*

**Revision number:** 1 **Revision date:** 10/03/2018

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

**1.1 Product identifiers**

**Product name:** Bis(2-ethylhexyl) Phthalate
**Product code:** P0297

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses:** Reagents.

**1.3 Details of the supplier of the safety data sheet**

**Supplier:**

TCI EUROPE N.V.
Boerenveldseweg 6
Haven 1063
B-2070 Zwijndrecht
Telephone: +32(0)3 735 07 00
E-mail: sales-eu@tcichemicals.com

**1.4 Emergency telephone number:** +32(0)70 245 245

## *SECTION 2: Hazards identification*

**2.1 Classification of the substance or mixture**

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008

**2.2 Label elements**

**Pictograms or hazard symbols**

**Signal word** No signal word
**Hazard statements** H360FD-May damage fertility. May damage the unborn child.
**Precautionary statements** 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, face protection.
P308+P313-IF exposed or concerned: Get medical advice or attention.
P405-Store locked up.
P501-Dispose of contents/container through a waste management company authorized by the local government.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

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

## *SECTION 3: Composition/information on ingredients*

**3.1 Substances**

**Components:** Bis(2-ethylhexyl) Phthalate
**Percent:** >98.0%(GC)
**CAS RN:** 117-81-7
**EC-No:** 204-211-0
**Synonyms:** DEHP , Di(2-ethylhexyl) Phthalate , Dioctyl Phthalate , DOP , Phthalic Acid Bis(2-ethylhexyl) Ester , Phthalic Acid Di(2-ethylhexyl) Ester , Phthalic Acid Dioctyl Ester
**Chemical Formula:** $C_{24}H_{38}O_4$

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

**Skin contact:** Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.

**Ingestion:** Get medical advice/attention.Rinse mouth.

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

**4.2 Most important symptoms and effects, both acute and delayed**

No data available

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

No data available

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media:** Dry chemical, foam, carbon dioxide.

**Unsuitable extinguishing media:** Water (It may scatter and spread fire.)

**5.2 Special hazards arising from the substance or mixture:** Carbon dioxide, Carbon monoxide

**5.3 Advice for firefighters:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc

**6.2 Environmental precautions:** Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned

**6.3 Methods and materials for containment and cleaning up:** Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

**6.4 Reference to other sections:** For disposal see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact!

**7.2 Conditions for safe storage, including any incompatibilities:** Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.

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

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

**ACGIH TLV(TWA):** 5 mg/m$^3$

**OSHA PEL(TWA):** 5 mg/m$^3$

**OSHA PEL(STEL):** 10 mg/m$^3$

**JSOH OELs(TWA):** 5 mg/m$^3$

**8.2 Exposure controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.

**Respiratory protection:** Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

**Hand protection:** Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

**Skin and body protection:** Impervious protective clothing. Protective boots, if the situation requires.

## *SECTION 9: Physical and chemical properties*

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state (20°C):** | Liquid |
| **Form:** | Clear |
| **Colour:** | Colorless - Very pale yellow |
| **Odour:** | Slight Characteristic |
| **pH:** | No data available |
| **Melting point/freezing point:** | -50°C |
| **Boiling point/range:** | 361°C |
| **Flash point:** | 218°C |
| **Evaporation rate(Butyl Acetate=1):** | No data available |
| **Flammability(solid, gas):** | No data available |
| **Flammability or explosive limits:** | |
| **Lower:** | 0.3% |
| **Upper:** | No data available |
| **Vapour pressure:** | 0.001kPa/20°C |
| **Vapour density:** | 13.45 |
| **Relative density:** | 0.99 |
| **Solubility(ies):** | |
| **[Water]** | Insoluble (0.285mg/L, 24°C) |
| **[Other solvents]** | |
| **Miscible:** | Hexane, Mineral oil |
| **Very soluble:** | Ether, Benzene, Ethanol |
| **Slightly soluble:** | Carbon tetrachloride |
| **Partition coefficient: n-octanol/water:** | 7.54 |
| **Autoignition temperature:** | 390°C |
| **Decomposition temperature:** | No data available |
| **Dynamic Viscosity:** | No data available |
| **Kinematic viscosity:** | No data available |

**9.2 Other safety information** No data available

## *SECTION 10: Stability and reactivity*

**10.1 Reactivity** No data available

**10.2 Chemical stability** Stable under proper conditions.

**10.3 Possibility of hazardous reactions** No special reactivity has been reported.

**10.4 Conditions to avoid** No data available

**10.5 Incompatible materials** Oxidizing agents, Acids, Bases, Nitrates

**10.6 Hazardous decomposition products** Carbon dioxide, Carbon monoxide

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

| | |
|---|---|
| **Acute Toxicity:** | orl-rat LD50:30 g/kg<br>orl-mus LD50:1500 mg/kg<br>skn-rbt LD50:25 g/kg<br>ivn-rat LD50:250 mg/kg |
| **Skin corrosion/irritation:** | skn-rbt 500 mg/24H MLD |
| **Serious eye damage/irritation:** | eye-rbt 500 mg/24H MLD |
| **Respiratory or skin sensitization:** | No data available |
| **Germ cell mutagenicity:** | dns-rat-lvr 500 umol/L<br>mmo-mus-lym 40 mg/L (+S9)<br>mmo-sat 5 mg/plate (-S9)<br>mmo-smc 1541 mg/L (+/-S9)<br>sce-hmn-lym 50 umol/L |
| **Carcinogenicity:** | orl-mus TDLo:260 g/kg/2Y-C<br>orl-rat TDLo:216 g/kg/2Y-C |
| **IARC =** | Group 2B (Possibly carcinogenic to humans) |
| **NTP =** | b (Reasonably anticipated to be carcinogens) |
| **Reproductive toxicity:** | ipr-mus TDLo:12780 mg/kg (1D male)<br>ipr-rat TDLo:5 g/kg (5-15D preg)<br>orl-mus TDLo:1.6 g/kg (17D preg)<br>orl-rat TDLo:352 mg/kg (multigeneration) |
| **STOT-single exposure:** | No data available |
| **STOT-repeated exposure:** | No data available |
| **Aspiration hazard:** | No data available |
| **RTECS Number:** | TI0350000 |

## SECTION 12: Ecological information

**12.1 Toxicity**

| | |
|---|---|
| **Fish:** | 96h LC50:75 mg/L (Oryzias latipes)<br>48h LC50:>3000 ppm (Oryzias latipes) |
| **Crustacea:** | 48h EC50:>100 mg/L (Daphnia magna) |
| **Algae:** | 72h EC50:>100 mg/L (Selenastrum capricornutum) |

**12.2 Persistence and degradability** 69 % (by BOD) , 89 % (by HPLC)

**12.3 Bioaccumulative potential** 1.0 - 3.4 (conc. 1 ppm) , 0.7 - 29.7 (conc. 0.1 ppm)

**12.4 Mobility in soil**

| | |
|---|---|
| **Log Pow:** | 7.54 |
| **Soil adsorption (Koc):** | 87420 - 510000 |
| **Henry's Law (PaM $^3$/mol):** | 2.7 x $10^{-2}$ |

**12.5 Results of PBT and vPvB assessment**

| | |
|---|---|
| **PBT:** | Not applicable |
| **vPvB:** | Not applicable |

**12.6 Other adverse effects** No data available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## SECTION 14: Transport information

**14.1 UN number** 3082

**14.2 UN proper shipping name**

| | |
|---|---|
| **ADR/RID** | Environmentally hazardous substance, liquid, n.o.s |
| **IMDG/IMO** | Environmentally hazardous substance, liquid, n.o.s |
| **ICAO/IATA** | Environmentally hazardous substance, liquid, n.o.s |

**14.3 Transport hazard class(es)**

| | |
|---|---|
| **ADR/RID** | 9: Miscellaneous dangerous goods |
| **IMDG/IMO** | 9: Miscellaneous dangerous goods |
| **ICAO/IATA** | 9: Miscellaneous dangerous goods |

**14.4 Packaging group**

| | |
|---|---|
| **ADR/RID** | III |
| **IMDG/IMO** | III |
| **ICAO/IATA** | III |

**14.5 Environmental hazards**

**Marine pollutant** Y

**14.6 Special precautions for user** No data available

## SECTION 15: Regulatory information

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

| | |
|---|---|
| **Water Hazard Classes (WGK) :** | Class 1 - Low hazard to waters |
| **Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006** | Listed (Annex XIV) |

**15.2 Chemical safety assessment** A chemical safety assessment has not been carried out.

## SECTION 16: Other information

**Prepared by:** TCI EUROPE N.V.
**Issue date:** 10/03/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.
The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet**