

Dibutyl Phthalate (RXSOL-26-1295-200)

MATERIAL SAFETY DATA SHEET • SALALAH CHEMICAL, OMAN

1. Product and Company Identification

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Product Name	Dibutyl Phthalate
Part Number	RXSOL-26-1295-200

Company Details:....

RX MARINE INTERNATIONAL

105, A wing , BSEL , TECH PARK.

VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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2. Composition / Information on ingredients

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Substances

Synonyms	N-Butyl phthalate Phthalic acid dibutyl ester DBP
Formula	C ₁₆ H ₂₂ O ₄
Molecular weight	278,34 g/mol
CAS-No.	84-74-2
EC-No.	201-557-4
Index-No.	607-318-00-4

Component	Classification	Concentration
Dibutyl phthalate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		
CAS-No. 84-74-2 EC-No 201-557-4 Index-No. 607-318-00-4	Repr. 1B; Aquatic Acute 1; Aquatic Chronic 2; H360FD, H400, H411 M-Factor - Aquatic Acute: 1	= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

3. Hazards Identification

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Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	
Reproductive toxicity, (Category 1B)	H360FD: May damage fertility. May damage the unborn child.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 2)	H411: Toxic to aquatic life with long lasting effects.

Label elements

Signal Word	Danger
Hazard Statements	H360FD May damage fertility. May damage the unborn child. H410 Very toxic to aquatic life with long lasting effects.
Precautionary Statements	P202 Do not handle until all safety precautions have been read and understood. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P391 Collect spillage. P405 Store locked up.
Supplemental Hazard Statements	None
Reduced Labeling (= 125 ml)	
Signal Word	Danger
Hazard statement(s)	H360FD May damage fertility. May damage the unborn child.
Precautionary statement(s)	P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P405 Store locked up.
Supplemental Hazard Statements	None
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

4. First Aid Measures

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Description of first aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
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If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

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Extinguishing media

Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system. spray to keep fire-exposed containers cool.Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains.

Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

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Precautions for safe handling

Advice on safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	
Storage conditions	Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.
Storage class	Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

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Control parameters

Ingredients with workplace control parameters

Exposure controls

Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
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Skin protection	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,4 mm Break through time: 480 min Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 60 min Material tested: KCL 741 Dermatril® L
Body Protection	Protective clothing.
Respiratory protection	Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
Control of environmental exposure	Do not let product enter drains. Risk of explosion.

9. Physical and chemical properties

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Physical state	Liquid, Clear
Colour	Colorless
Odor	Ester-like
Melting point/freezing point	Melting point/range: -35 °C - lit.
Initial boiling point and boiling range	340 °C - lit.
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Lower explosion limit: ca.0,4 %(V)
Flash point	186,5 °C - open cup
Autoignition temperature	Ca.390 °C at 1.000 h Pa - DIN 51794
Decomposition temperature	No data available
pH	At 10 mg/l at 20 °C
Viscosity	Viscosity, kinematic: 18,8 mm ² /s at 20 °C - ASTM D 445 Viscosity, dynamic: No data available
Water solubility	ca.0,0114 g/l at 25 °C - OECD Test Guideline 105- slightly soluble

Partition coefficient: n-octanol/water	log Pow: 4,46 at 30 °C - Potential bioaccumulation
Vapor pressure	0,1 hPa at 20 °C
Density	1,043 g/cm ³ at 25 °C - lit.
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	None
Other safety information	
Relative vapor density	9,58

10. Stability and reactivity

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Reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	Violent reactions possible with: Strong oxidizing agents Chlorine Bases nitrates
Conditions to avoid	Strong heating.
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

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Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - male and female - 6.279 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 4 h - >= 15,68 mg/l - aerosol Remarks: (ECHA) LD50 Dermal - Rabbit - > 21.000 mg/kg Remarks: (RTECS)
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation - 72 h (OECD Test Guideline 405)
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity	Test Type: Ames test Test system: <i>S. typhimurium</i> Metabolic activation: with and without metabolic activation Result: negative Remarks: (ECHA) Test Type: Micronucleus test Species: Mouse Application Route: Oral Result: negative Remarks: (ECHA)
Carcinogenicity	No data available
Reproductive toxicity	May damage the unborn child. May damage fertility.
Specific target organ toxicity-single exposure)	No data available
Specific target organ toxicity-repeated exposure)	No data available
Aspiration hazard	No data available
Additional Information	
Endocrine disrupting properties Product	
Assessment	This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

12. Ecological information

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Toxicity	
Toxicity to fish	Static test LC50 - <i>Lepomis macrochirus</i> (Bluegill sunfish) - ca. 0,48mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - <i>Daphnia magna</i> (Water flea) - ca. 2,99 mg/l - 48 h (US-EPA)
Toxicity to algae	static test EC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 0,75 mg/l - 10 d (US-EPA) static test NOEC - <i>Pseudokirchneriella subcapitata</i> (green algae) - 0,39 mg/l - 10 d (US-EPA)
Toxicity to bacteria	EC50 - <i>Tetrahymena pyriformis</i> - 2,2 mg/l - 24 h Remarks: (ECHA)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - <i>Oncorhynchus mykiss</i> (rainbow trout) - 0,1 mg/l - 99 d (US-EPA)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - <i>Daphnia magna</i> (Water flea) - 0,158 mg/l- 21 d (OECD Test Guideline 211) Remarks: The value is given in analogy to the following substances: Bis(2-ethylhexyl) phthalate

Persistence and degradability	
Biodegradability	Result: 81 % - Readily biodegradable. (Regulation (EC) No. 440/2008, Annex, C.4-C)
Bioaccumulative potential	
Bioaccumulation	Pimephales promelas (fathead minnow) - 11 d - 0,0348 mg/l(dibutyl phthalate) Bioconcentration factor (BCF): 2.165 Remarks: Does not bioaccumulate.
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties Product	
Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	Discharge into the environment must be avoided.

13. Disposal considerations

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Waste treatment Method	No data available
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14. Transport information

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UN number	ADR/RID:3082 IMDG:3082 IATA: 3082
UN proper shipping name	ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl phthalate) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl phthalate) IATA: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Transport hazard class(es)	ADR/RID: 9 IMDG: 9 IATA:9
Packaging group	ADR/RID: III IMDG: III IATA:III
Environmental hazards	ADR/RID: yes IMDG Marine pollutant: yes IATA: yes
Special precautions for user	Tunnel restriction code : (-)
Further information	EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
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Authorisations and/or restrictions on use	REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : dibutyl phthalate This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006. Listed substance / Sunset Date : dibutyl phthalate / 21.02.2015 After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate. REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)
National legislation	Seveso III: Directive 2012/18/EU of the E1 ENVIRONMENTAL HAZARDS European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

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Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages. DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.
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