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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Dibutyl Phthalate (DBP)	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

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

Product name	Dibutyl Phthalate (DBP)
Synonyms	DBP; Di-n-butyl phthalate; Phthalic acid dibutyl ester
CAS No.	84-74-2
EC No.	201-557-4
Molecular formula	C16H22O4
Molecular weight	278.34 g/mol
Relevant identified uses	Plasticizer for PVC, cellulose resins, adhesives, coatings and printing inks
Uses advised against	None
Company	Richest Group Ltd.
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SECTION 2: Hazards identification

GHS Classification	Repr. 1B; Aquatic Acute 1
Pictogram(s)	GHS08, GHS09
Signal word	Danger
Hazard statement(s)	H360Df May damage the unborn child. Suspected of damaging fertility. H400 Very toxic to aquatic life.
Precautionary statement(s)	P201; P202; P273; P280; P308+P313; P391; P405; P501

Other hazards	None known.

SECTION 3: Composition/information on ingredients

Component	Dibutyl phthalate
CAS No.	84-74-2
EC No.	201-557-4
Classification	Repr. 1B; Aquatic Acute 1
Concentration (%)	≤100 %

SECTION 4: First aid measures

If inhaled	Remove person to fresh air. Call a physician.
In case of skin contact	Take off contaminated clothing. Rinse skin with water/shower. Consult a physician.
In case of eye contact	Rinse out with plenty of water. Call an ophthalmologist. Remove contact lenses.
If swallowed	Make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects	The most important known symptoms and effects are described in section 2.2 and section 11.
Indication of any immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray, foam, carbon dioxide (CO2), dry powder
Unsuitable extinguishing media	None (no limitations of extinguishing agents are given)
Special hazards arising from the chemical	Carbon oxides. Combustible. Vapors are heavier than air and may spread along floors.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Wear suitable protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency	Do not breathe vapors/aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area.

procedures	
Environmental precautions	Do not let product enter drains or watercourses. Very toxic to aquatic life.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Do not inhale vapours/aerosols. Ensure adequate ventilation.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a cool, dry and well-ventilated place. Store locked up.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	TLV (ACGIH): 5 mg/m³ TWA; MAK: 0.58 mg/m³ (0.05 ppm), peak limitation category I(2), pregnancy risk group C
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Ensure adequate ventilation. Change contaminated clothing; wash hands after working with substance.
Eye/face protection	Safety glasses (tested and approved under NIOSH (US) or EN 166 (EU))
Skin protection	Handle with chemical-resistant gloves
Body protection	Protective clothing
Respiratory protection	Required when vapours/aerosols are generated
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties

Physical state	Oily liquid
Colour	Colorless
Odour	Slight aromatic odor
Melting point / freezing point	-35 °C
Boiling point or initial boiling point and boiling range	340 °C
Flammability	Combustible liquid; not classified as flammable (flash point > 60 °C)

Lower and upper explosion limit / flammability limit	Lower explosion limit: 0.5 % (V) at 236 °C; upper limit not determined
Flash point	171 °C - closed cup
Auto-ignition temperature	402 °C
Decomposition temperature	No data available
pH	Not applicable (practically insoluble in water)
Kinematic viscosity	ca. 16 mm2/s at 25 °C
Solubility	Water: ca. 0.01 g/l (insoluble)
Partition coefficient n-octanol/water	log Pow: 4.5
Vapour pressure	< 0.01 hPa at 20 °C
Density and/or relative density	1.044-1.048 g/cm3 at 20 °C
Relative vapour density	ca. 9.6 (Air = 1.0)
Particle characteristics	Not applicable (liquid)

SECTION 10: Stability and reactivity

Reactivity	Reacts with strong oxidants (ICSC 0036); incompatible with nitrates, strong oxidizers, alkalis and acids; reacts explosively with liquid chlorine
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Decomposes on burning, producing toxic and irritating fumes (phthalic anhydride); reacts with strong oxidants (ICSC 0036)
Conditions to avoid	Strong heating.
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Carbon oxides (in the event of fire)

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 8,000 mg/kg; LD50 Dermal - Rabbit - > 20,000 mg/kg
Skin corrosion/irritation	Slight irritation
Serious eye damage/irritation	Slight irritation
Respiratory or skin sensitization	Not classified as a sensitizer
Germ cell mutagenicity	Not mutagenic in standard in-vitro assays

Carcinogenicity	Not listed by IARC, NTP, ACGIH or OSHA as a carcinogen
Reproductive toxicity	May damage the unborn child. Suspected of damaging fertility.
STOT - single exposure	Not classified (based on available data)
STOT - repeated exposure	Not classified (based on available data)
Aspiration hazard	Not classified (based on available data)

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	Very toxic to aquatic life. Fish: LC50 - Pimephales promelas - 0.85 mg/l - 96 h; Daphnia: EC50 - Daphnia magna - 3.9 mg/l - 48 h
Persistence and degradability	Readily biodegradable
Bioaccumulative potential	log Pow: 4.5; potential for bioaccumulation is low due to rapid metabolism.
Mobility in soil	Adsorbs to organic matter; low mobility in soil expected
Other adverse effects	None known

SECTION 13: Disposal considerations

Product disposal methods	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of contaminated packaging in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not dangerous goods (ADR/RID, IMDG, IATA)
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards (Marine pollutant)	No (not a marine pollutant)
Special precautions for user	No special precautions required during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	REACH SVHC Candidate List: Listed / EINECS: Listed (201-557-4) / TSCA: Listed / IECSC: Listed / Catalogue of Hazardous Chemicals (China): Listed

SECTION 16: Other information

Full text of H-Statements	H360Df May damage the unborn child. Suspected of damaging fertility. H400 Very toxic to aquatic life.
Revision date	2026-10-29
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.