



DI-N-BUTYL PHTHALATE (RING-D4, 98%)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/12/2010
DLM-1367

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Supersedes: 19/11/2015

Version: 3.1

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

1.1. Product identifier

Product form : Substance
Substance name : DI-N-BUTYL PHTHALATE (RING-D4, 98%)
EC Index-No. : 607-318-00-4 (Unlabeled)
EC-No. : 201-557-4 (Unlabeled)
CAS-No. : 93952-11-5
Product code : DLM-1367
Formula : C6D4(COO(CH2)3CH3)2
Synonyms : Phthalic acid dibutyl ester. Dibutyl phthalate. DBP

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Repr. 1A H360
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R33

Full text of R-phrases: see section 16

GHS-US classification

Repr. 1A H360
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Eyes, Kidney, Liver, Lungs, Testes, Central nervous system.

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2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) :

: Danger

Hazard statements (CLP) :

: H360 - May damage fertility. May damage the unborn child. (in contact with skin, if inhaled, if swallowed)
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

: P273 - Avoid release to the environment.
P280 - Wear protective clothing, protective gloves.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to Comply with applicable regulations

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

GHS09

Signal word (GHS-US) :

: Danger

Hazard statements (GHS-US) :

: H360 - (Dermal, Inhalation, oral)
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, protective gloves.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
DI-N-BUTYL PHTHALATE (RING-D4, 98%)	(CAS-No.) 93952-11-5 (EC-No.) 201-557-4 (Unlabeled) (EC Index-No.) 607-318-00-4 (Unlabeled)	100	R33

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DI-N-BUTYL PHTHALATE (RING-D4, 98%)	(CAS-No.) 93952-11-5 (EC-No.) 201-557-4 (Unlabeled) (EC Index-No.) 607-318-00-4 (Unlabeled)	100	Repr. 1A, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
DI-N-BUTYL PHTHALATE (RING-D4, 98%) (Main constituent)	(CAS-No.) 93952-11-5	100	Repr. 1A, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

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3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- First-aid measures after inhalation : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
- First-aid measures after skin contact : Wash off with soap and plenty of water. Consult a physician.
- First-aid measures after eye contact : Flush eyes with water as a precaution.
- First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

- Symptoms/effects after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.
- Symptoms/effects after skin contact : May be harmful if absorbed through skin. May cause skin irritation.
- Symptoms/effects after eye contact : May cause eye irritation.
- Symptoms/effects after ingestion : May be harmful if swallowed.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Not flammable or combustible.

6.1.1. For non-emergency personnel

- Emergency procedures : Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

- For containment : Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DI-N-BUTYL PHTHALATE (RING-D4, 98%) (93952-11-5)

Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ Eye & Upper Respiratory Tract irritation, Testicular damage.
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8.2. Exposure controls

Eye protection	: Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection	: When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid
Molecular mass	: 282.38 g/mol (Labeled)
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -35 °C (- 31 °F) - lit
Freezing point	: No data available
Boiling point	: 340 °C (644 °F) - lit
Flash point	: 171 °C (339.8 °F) - closed cup
Auto-ignition temperature	: 402 °C (756 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 1.3 hPa (1.0 mmHg) at 147.0 °C (296.6 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.043 g/cm ³ at 25 °C (77 °F)
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: ≥ 0.47 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agents, Nitrates, Bases, Acids, Chlorine.

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10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility. May damage the unborn child. (in contact with skin, if inhaled, if swallowed).
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

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LC50 fish 1	0.85 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	3.7 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.32 mg/l Pimephales promelas (fathead minnow) - 96 h

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : UN3082

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.

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Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols : G - Identifies PSN requiring a technical name
Packing group (DOT) : III - Minor Danger
DOT Special Provisions (49 CFR 172.102) : 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.
146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.
173 - An appropriate generic entry may be used for this material.
335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx) : 155
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT RQ : 10 lbs
Marine pollutant : Marine pollutant



14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III
Class (ADR) : 9 - Miscellaneous dangerous substances and articles
Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6
Hazard labels (ADR) : 9 - Miscellaneous dangerous substances and articles



Tunnel restriction code (ADR) : E
Limited quantities (ADR) : 5I
EAC : •3Z
Excepted quantities (ADR) : E1

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Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail : No limit
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit
CFR 175.75)

14.4. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

DI-N-BUTYL PHTHALATE (RING-D4, 98%) (93952-11-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Subject to reporting requirements of United States SARA Section 302
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

DI-N-BUTYL PHTHALATE (RING-D4, 98%) (93952-11-5)
Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

DI-N-BUTYL PHTHALATE (RING-D4, 98%)(93952-11-5)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Yes
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

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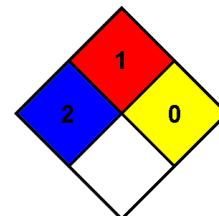
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Full text of R-, H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Repr. 1A	Reproductive toxicity Category 1A
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R33	Danger of cumulative effects

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product