

SAFETY DATA SHEET

Preparation Date: 7/31/2017

Revision Date: 5/31/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: DI115
Product Name: DIBUTYL PHTHALATE

Other means of identification

Synonyms: Dibutyl 1,2-benzenedicarboxylate
 Di-n-butyl phthalate
 o-Benzenedicarboxylic acid, dibutyl ester
 Benzene-o-dicarboxylic acid di-n-butyl ester
 n-Butylphthalate
 DBP (ester)
 Dibutyl o-phthalate

CAS #: 84-74-2
RTECS # TI0875000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Solvent. Plasticizer.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Reproductive toxicity	Category 1B
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Label elements

Danger

Hazard statements

May damage fertility or the unborn child

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use

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

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

Precautionary Statements - Response*IF exposed or concerned: Get medical advice/attention***Precautionary Statements - Storage**

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Dibutyl Phthalate	84-74-2	100

4. FIRST AID MEASURES**First aid measures****General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.

Eye Contact:

Flush eyes with water for 15 minutes. Get medical attention if irritation occurs.

Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

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

May cause nausea, headache, vomiting
May affect the liver
It may affect the kidneys
Central nervous system effects
Dizziness
Somnolence

Ataxia
Convulsions
May affect the blood (normocytic anemia)
It may affect the thyroid
May cause slight skin irritation
May cause slight eye irritation

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide.

Specific hazards: May be combustible at high temperatures. May be ignited by heat, sparks or flames.

Special Protective Actions for Firefighters

Specific Methods: For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Strong oxidizing agents
Chlorine
Nitrates
Bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Dibutyl Phthalate	84-74-2	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Dibutyl Phthalate	84-74-2	5 mg/m ³ TWA	5 mg/m ³ TWA	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Dibutyl Phthalate	84-74-2	5 mg/m ³ TWA	5 mg/m ³ TWA 10 mg/m ³ STEL

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Product code: DI115

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Eye protection:	Goggles
Skin and body protection:	Long sleeved clothing Chemical resistant apron Gloves
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: Viscous. Oily.	Color: Colorless. Light yellow.
Odor: Slight. Aromatic. Ester-like.	Taste Strong. Bitter.	Formula: C16H22O4
Molecular/Formula weight: 278.35	Flammability: No information available	Flashpoint (°C/°F): 157 °C/315 °F
Flash Point Tested according to: Closed cup	Autoignition Temperature (°C/°F): 402 °C/757 °F	Lower Explosion Limit (%): 0.5%
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): -35 °C/-31 °F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 340 °C/644 °F	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 1.0459-1.0465	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: 9.58	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): log Kow = 4.50	Viscosity: No information available
Miscibility: Miscible with Ether Miscible with Ethanol	Solubility: Practically insoluble in water Very soluble in Acetone Very soluble in Benzene Soluble in Carbon tetrachloride	

10. STABILITY AND REACTIVITY

Reactivity
Liquid chlorine reacts explosively with Dibutyl Phthalate

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

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Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Strong oxidizing agents
Chlorine
Nitrates
Bases

Hazardous decomposition products: No information available.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Dibutyl Phthalate	
CAS-No.	84-74-2

LD50/oral/rat = 7499 mg/kg Oral LD50 Rat

LD50/oral/mouse = 3474 mg/kg

LD50/dermal/rabbit = >20 mL/kg Dermal LD50 Rabbit; > 20000 mg/kg Dermal LD 50 Rabbit

LD50/dermal/rat = No information available

LC50/inhalation/rat = >15.68 mg/L Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 7499 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 3474 mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = > 20000 mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

- Skin Contact:** Substance may cause slight skin irritation. May cause stinging and burning sensation. It may be absorbed through the skin.
- Eye Contact:** May cause slight or mild eye irritation. Symptoms may include stinging, tearing, redness.
- Inhalation** May cause irritation of respiratory tract. It may affect behavior/central nervous system (ataxia). It may affect behavior/central nervous system (convulsions/seizures). May cause dizziness and headache. May cause nausea.
- Ingestion** May cause gastrointestinal (digestive) tract irritation with nausea, vomiting. May affect behavior (hallucinations). May affect behavior/central nervous system (dizziness, headache). May affect urinary system (kidneys). May affect behavior/central nervous system (somnolence). May affect respiration (dyspnea, respiratory depression).
- Aspiration hazard** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Chronic Toxicity** Chronic exposure may affect the liver and kidneys. Prolonged or repeated inhalation may affect the brain. Prolonged or repeated inhalation may affect the blood (normocytic anemia). Prolonged or repeated ingestion may affect the thyroid (thyroid hypofunction). Prolonged or repeated ingestion may cause weight loss.
- Sensitization:** No information available.
- Mutagenic Effects:** Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects
- Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Dibutyl Phthalate	84-74-2	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)**IARC (International Agency for Research on Cancer)**NTP (National Toxicology Program)**OSHA (Occupational Safety and Health Administration of the US Department of Labor)***Reproductive toxicity** May damage fertility or the unborn child

- Reproductive Effects:** Possible risk of impaired fertility
- Developmental Effects:** May cause adverse developmental effects
May cause harm to the unborn child
- Teratogenic Effects:** May cause birth defects (teratogenic effects)
May cause harm to the unborn child

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: Kidneys. Nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Dibutyl Phthalate - 84-74-2

Freshwater Algae Data: 1.2 mg/L EC50 *Desmodesmus subspicatus* 72 h 0.4 mg/L EC50
Pseudokirchneriella subcapitata 96 h

Freshwater Fish Species Data: 0.71 - 1.2 mg/L LC50 *Pimephales promelas* 96 h flow-through 1 0.31 - 5.45 mg/L
LC50 *Pimephales promelas* 96 h static 1 1.24 mg/L LC50 *Oncorhynchus mykiss*
96 h flow-through 1 1.24 - 5.3 mg/L LC50 *Oncorhynchus mykiss* 96 h static 1 1.38
- 1.74 mg/L LC50 *Lepomis macrochirus* 96 h flow-through 1 0.42 - 1.28 mg/L
LC50 *Lepomis macrochirus* 96 h static 1

Water Flea Data: 2.99 mg/L EC50 *Daphnia magna* 48 h 3.4 mg/L EC50 *Daphnia magna* 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: It is expected to have low mobility based upon estimated Koc.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Dibutyl Phthalate	84-74-2	None	None	None	U069

14. TRANSPORT INFORMATION

DOT

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Class No information available
Packing group: III
Emergency Response Guide Number 171
Marine Pollutant Marine Pollutant
DOT RQ (lbs): No information available
Special Provisions 8, 146, 173, 335, IB3, T4, TP1, TP29

Symbol(s): [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III, Marine pollutant

TDG (Canada)

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant Marine Pollutant
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Phthalate), 9, III

ADR

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Special Provisions 274, 335, 375, 601
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (DIBUTYL PHTHALATE), 9, III

IMO / IMDG

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant Marine Pollutant
EMS: F-A
Special Provisions 274, 335, 969
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (DIBUTYL PHTHALATE), 9, III, Marine pollutant

RID

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Special Provisions 274, 335, 375, 601
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (DIBUTYL PHTHALATE), 9, III

ICAO

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Phthalate), 9, III
Special Provisions A97, A158, A197

IATA

Product code: DI115

Product name: DIBUTYL PHTHALATE

UN-No: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 9L
Special Provisions No information available
Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Phthalate), 9, III

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Dibutyl Phthalate</i>	84-74-2	PresentACTIVE	Present KE-02214	Present	Present (3)-1303	Present	Present	Present 201-557-4

U.S. Regulations

Dibutyl Phthalate


- Massachusetts RTK:** Present
- New Jersey RTK Hazardous Substance List:** sn 0773
- New Jersey (EHS) List:** SN 0773 500 lb TPQ
- New Jersey - Discharge Prevention - List of Hazardous Substances:** Present
- Pennsylvania RTK:** Environmental hazard
- Pennsylvania RTK - Environmental Hazard List** Present
- Minnesota - Hazardous Substance List:** Present
- New York Release Reporting - List of Hazardous Substances:** 10 lb RQ
1 lb RQ
- Louisiana Reportable Quantity List for Pollutants:** Listed
- California Directors List of Hazardous Substances:** Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

 **WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>Dibutyl Phthalate</i>	84-74-2	Not Listed	developmental toxicity	male reproductive toxicity	female reproductive toxicity

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Dibutyl Phthalate</i>	84-74-2	10 lb final RQ 4.54 kg final RQ	None	None	None	1.0 % de minimis concentration

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Dibutyl Phthalate	84-74-2	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Dibutyl Phthalate
84-74-2 (100)

WHMIS 2015 Hazard Classification
Reproductive Toxicity - Category 1: H360 May damage fertility or the unborn child.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

D2A Very toxic materials

Components
Dibutyl Phthalate

WHMIS 1988
D2A

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Dibutyl Phthalate	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Dibutyl Phthalate	84-74-2	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Dibutyl Phthalate	84-74-2	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Dibutyl Phthalate	84-74-2	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Dibutyl Phthalate	84-74-2	Reproductive Toxicity - Repr. 1B: H360Df May damage the unborn child. Suspected of damaging fertility.; Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life.607-318-00-4

EU - CLP (1272/2008)

R-phrases(s)

R61 - May cause harm to the unborn child.
R62 - Possible risk of impaired fertility.
R50 - Very toxic to aquatic organisms.

S -phrase(s)

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S53 - Avoid exposure - obtain special instructions before use.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Dibutyl Phthalate	84-74-2	N; R50 Repr.Cat.2; R61 Repr.Cat.3; R62	No information	S53 S45 S61

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

T - Toxic

N - Dangerous for the environment.

T



N

**16. OTHER INFORMATION**

Preparation Date: 7/31/2017
Revision Date: 5/31/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet