

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.03.2019

Version number 2

Revision: 23.03.2019

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

- **Product identifier**
- **Trade name: Di-n-butyl Phthalate**
- **Part number: DMP-015**
- **CAS Number:**
84-74-2
- **EC number:**
201-557-4
- **Index number:**
607-318-00-4
- **Relevant identified uses of the substance or mixture and uses advised against**
Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str.8
76337 Waldbronn
Germany
- **Further information obtainable from:**
Telephone: 0800 603 1000
pdl-msds_author@agilent.com
- **Emergency telephone number: CHEMTREC®: +(44)-870-8200418**

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 1B H360Df May damage the unborn child. Suspected of damaging fertility.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.

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· Hazard pictograms


GHS07 GHS08 GHS09

· Signal word Danger
· Hazard-determining components of labelling:

dibutyl phthalate

· Hazard statements

H332 Harmful if inhaled.

H360Df May damage the unborn child. Suspected of damaging fertility.

H400 Very toxic to aquatic life.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P312 Call a POISON CENTER/doctor if you feel unwell.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Substances
· CAS No. Description

84-74-2 dibutyl phthalate

· Identification number(s)
· EC number: 201-557-4

· Index number: 607-318-00-4

· SVHC

84-74-2	dibutyl phthalate
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* 4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.

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- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

Ingredients with limit values that require monitoring at the workplace:				
84-74-2 dibutyl phthalate				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding: 2px;">WEL</td> <td style="padding: 2px;">Short-term value: 10 mg/m³</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Long-term value: 5 mg/m³</td> </tr> </table>	WEL	Short-term value: 10 mg/m ³		Long-term value: 5 mg/m ³
WEL	Short-term value: 10 mg/m ³			
	Long-term value: 5 mg/m ³			

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

- **Respiratory protection:**

When used as intended with Agilent instruments the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device equipment with appropriate organic or acid gas cartridge.

- **Protection of hands:**

Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

- **Material of gloves**

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: > 4 hours

- **Eye protection:** Goggles recommended during refilling

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Colour:	Colourless
· Odour:	Weak, characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	-35.8 °C
Initial boiling point and boiling range:	340 °C
· Flash point:	186 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	390 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	<0.1 Vol %
Upper:	1.97 Vol %
· Vapour pressure at 20 °C:	0.1 hPa
· Density at 20 °C:	1.047 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water at 20 °C:	
	0.1 g/l
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic at 20 °C:	12-14 mPas
Kinematic:	Not determined.
· Solvent content:	
VOC (EC)	0.00 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.

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- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity**
Harmful if inhaled.

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4 h	15.7 mg/L (rat)
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Oral	LD50	6,300 mg/kg (rat)
Dermal	LD50	>4,000 mg/kg (rabbit)
Inhalative	LC50/4 h	15.68 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**
May damage the unborn child. Suspected of damaging fertility.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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 · **Other adverse effects** No further relevant information available.

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13 Disposal considerations

 · **Waste treatment methods**

 · **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

 · **European waste catalogue**

HP 10	Toxic for reproduction
HP 14	Ecotoxic

 · **Uncleaned packaging:**

 · **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

 · **UN-Number**

 · **ADR, IMDG, IATA**

UN3082

 · **UN proper shipping name**

 · **ADR**

 3082 ENVIRONMENTALLY HAZARDOUS
 SUBSTANCE, LIQUID, N.O.S. (dibutyl phthalate)
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
 LIQUID, N.O.S. (dibutyl phthalate), MARINE
 POLLUTANT

 · **IMDG**

 · **IATA**

 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
 LIQUID, N.O.S. (dibutyl phthalate)

 · **Transport hazard class(es)**

 · **ADR, IMDG, IATA**

 · **Class**

9 Miscellaneous dangerous substances and articles.

 · **Label**

9

 · **Packing group**

 · **ADR, IMDG, IATA**

III

 · **Environmental hazards:**

 · **Marine pollutant:**

Symbol (fish and tree)

 · **Special marking (ADR):**

Symbol (fish and tree)

 · **Special marking (IATA):**

Symbol (fish and tree)

 · **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

 · **Danger code (Kemler):**

90

 · **Stowage Category**

A

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· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIBUTYL PHTHALATE), 9, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)
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Sunset date: 2015-02-21

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 30, 51b

- **National regulations:**

- **Other regulations, limitations and prohibitive regulations**

· Substances of very high concern (SVHC) according to REACH, Article 57
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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- **Department issuing SDS:** Document Control / Regulatory

- **Contact:** regulatory@ultrasci.com

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Repr. 1B: Reproductive toxicity – Category 1B
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

· * **Data compared to the previous version altered.**

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