An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

#### **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1. Product identifiers** 

Product name: Dibutyl phthalate, GR 99%+

Product Code: D 1467 CAS No: 84-74-2

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Reproductive toxicity, (Category

1B)

Short-term (acute) aquatic hazard, (Category 1) Long-term (chronic) aquatic

hazard, (Category 2)
2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H360FD

H410

**Precautionary Statements** 

P202

P273

P280

P308 + P313

P308 1 P391 P405

Supplemental Hazard

Statements

Restricted to professional users. Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H360FD

**Precautionary Statements** 

P202

P280

P308 + P313

P405

H360FD: May damage fertility. May damage the unborn child.

H400: Very toxic to aquatic life.

H411: Toxic to aquatic life with long lasting effects.

Danger

May damage fertility. May damage the unborn child. Very toxic to aquatic life with long lasting effects.

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

Avoid release to the environment.

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

IF exposed or concerned: Get medical advice/ attention.

Collect spillage. Store locked up.

none

Danger

May damage fertility. May damage the unborn child.

Do not handle until all safety precautions have been read and

understood.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

IF exposed or concerned: Get medical advice/ attention.

Store locked up.

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Supplemental Hazard

none

Statements

2.3 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:

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

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.

#### **SECTION 3: Composition/information on ingredients**

3.1 Substances

Synonyms: n-Butyl phthalate

Phthalic acid dibutyl ester

DBP

Formula : C16H22O4 Molecular weight : 278,34 g/mol CAS-No. : 84-74-2 EC-No. : 201-557-4

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)	The second	
CAS-No. 84-74-2	Repr. 1B; Aquatic Acute 1; Aquatic	<= 100 %
EC-No. 201-557-4	Chronic 2; H360FD, H400, H411 M-	
	Factor - Aquatic Acute: 1	

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

### **SECTION 4: First aid measures**

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

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.

4.2 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

4.3 Indication of any immediate medical attention and special treatment needed

No data available

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#### **SECTION 5: Firefighting measures**

5.1 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.

5.2 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.

5.3 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.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6: Accidental release measures**

6.1 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.

6.2 Environmental precautions

Do not let product enter drains.

6.3 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 carefully with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 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

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### **SECTION 8: Exposure controls/personal protection**

8.1 Control parameters

Ingredients with workplace control parameters

8.2 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). Safety glasses Skin protection

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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 entrepeneur 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.

#### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color c) Odor

d) Meltina

point/freezing point

e) Initial boiling point

and boiling range

f) Flammability (solid,

gas)

g) Úpper/lower flammability or

explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition temperature

k) pH

I) Viscosity

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density

Relative density

liquid, clear colorless ester-like

Melting point/ range: -35 °C - lit.

340 °C - lit.

No data available

Lower explosion limit: ca.0,4 %(V)

186,5 °C - open cup

ca.390 °C

at 1.000 hPa - DIN 51794

No data available

at 10 mg/l at 20 °C

neutral

Viscosity, kinematic: 18,8 mm2/s at 20 °C - ASTM D 445

Viscosity, dynamic: No data available

ca.0,0114 g/l at 25 °C - OECD Test Guideline 105- slightly

log Pow: 4,46 at 30 °C - Potential bioaccumulation

< 0,1 hPa at 20 °C 1,043 g/cm3 at 25 °C - lit.

No data available

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q) Relative vapor

density

r) Particle

characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

Relative vapor density

No data available

No data available

No data available

none

9,58

## **SECTION 10: Stability and reactivity**

10.1 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.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Chlorine

Bases

nitrates

acids

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

### **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - ca. 0,48

mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - ca. 2,99 mg/l - 48 h

(US-EPA)

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (green algae) -

0,75 mg/l - 10 d

(US-EPA)

static test NOEC - Pseudokirchneriella subcapitata (green algae) -

0,39 mg/l - 10 d

(US-EPA)

Toxicity to bacteria EC50 - Tetrahymena pyriformis - 2,2 mg/l - 24 h

Remarks: (ECHA)

Toxicity to

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fish(Chronic toxicity)

flow-through test NOEC - Oncorhynchus mykiss (rainbow trout) - 0,1

mg/l - 99 d (US-EPA)

Toxicity to daphnia and other aquatic

invertebrates(Chronic toxicity)

flow-through test NOEC - Daphnia magna (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

12.2 Persistence and degradability

Biodegradability Result: 81 % - Readily biodegradable.

(Regulation (EC) No. 440/2008, Annex, C.4-C)

12.3 Bioaccumulative potential

Bioaccumulation Pimephales promelas (fathead minnow) - 11 d

- 0,0348 mg/l(dibutyl phthalate) Bioconcentration factor (BCF): 2.165 Remarks: Does not bioaccumulate.

12.4 Mobility in soil No data available

12.5 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.

12.6 Endocrine disrupting properties

Product:

Assessment : This substance/mixture contains components

considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission

Delegated Regulation (EU) 2017/2100.

Components: dibutyl phthalate:

Assessment : The substance is considered to have endocrine

disrupting properties according to REACH Article 57(f)

for the environment.

12.7 Other adverse effects

Discharge into the environment must be avoided.

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

No data available

### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 3082 IMDG: 3082 IATA: 3082

14.2 UN proper shipping name

ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl

phthalate)

IMDG : ENVIRÓNMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl

phthalate)

IATA : Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group
ADR/RID: III IMDG: III

IMDG: III IATA: III

14.5 Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

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14.6 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.

### **SECTION 15: Regulatory information**

15.1 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

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)

: dibutyl phthalate

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

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.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.