

Website:- chemicalbull.com MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name : **Dibutyl Maleate**

CAS-No. : 105-76-0

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company :ChemicalBull Pvt Ltd

123/124, Panchratna, G.I.D.C Char Rasta, Vapi-396195 Dist, Valsad, Gujarat, INDIA **Website:**- chemicalbull.com

Email: info@chemicalbull.com

1.4 Emergency telephone

Emergency Phone : +91 9696960250

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation

Skin sensitization

Specific target organ toxicity - repeated exposure,

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

2.2 Label elements

Labelling according Regulation

Pictogram

Signal word Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated

exposure.

Precautionary statement(s)

P280 Wear protective gloves.

Supplemental Hazard

Statements

none

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : $C_{12}H_{20}O_4$ Molecular weight : 228.28 g/molCAS-No. : 105-76-0

Component	Classification	Concentration
di-n-butyl maleate		
	Skin Sens. 1; STOT RE 2; Aquatic Chronic 2; H317, H373, H411	<= 100 %

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

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

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

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

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

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

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

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination respirator cartridges as a backup to engineering controls. If the respirator is the solemeans of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Color: colorless

b) Odor ester-like

c) Odor Threshold No data availabled) pH No data available

e) Melting point/range: -85 °C at 1.013 hPa

point/freezing point

f) Initial boiling point 281 °C - lit.

and boiling range

g) Flash point 138 °C - closed cup
h) Evaporation rate No data available
i) Flammability (solid, No data available

gas)

j) Upper/lower No data available

flammability or

explosive limits

k) Vapor pressure 0,0027 hPa at 20 °C - OECD Test Guideline 104

I) Vapor density 7,88 - (Air = 1.0)

m) Relative density 0,988 g/cm3 at 25 °C - lit.

n) Water solubility 0,17 g/l at 20 $^{\circ}$ C - slightly soluble

o) Partition coefficient: log Pow: 3,39 at 25 °C - OECD Test Guideline 117

n-octanol/water

p) Autoignition 265 °C temperature at 1.013 hPa

q) Decomposition No data available

temperature

r) Viscosity No data availables) Explosive properties No data availablet) Oxidizing properties No data available

9.2 Other safety information

Relative vapor 7,88 - (Air = 1.0)

density

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, Strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - >= 3.730 mg/kg

Remarks: (ECHA)

LC50 Inhalation - Rat - male and female - 4 h - > 5 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation - 72 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: slight irritation - 72 h (OECD Test Guideline 405)

Respiratory or skin sensitization

Patch test: - Human Result: positive Remarks: (IUCLID)

Sensitisation test (Magnusson and Kligman): - Guinea pig

Result: positive

(OECD Test Guideline 406)

Germ cell mutagenicity

In vitro mammalian cell gene mutation test

Mouse lymphoma test Result: negative Ames test

Salmonella typhimurium

Result: negative

OECD Test Guideline 474

Mouse - male and female - Bone marrow

Result: negative **Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

Ingestion - May cause damage to organs through prolonged or repeated exposure. - Kidney Oral - Kidney

Aspiration hazard

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 90 d - LOAEL (Lowest observed adverse effect level) - 30 mg/kg

Subchronic toxicity RTECS: ON0875000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - 1,2 mg/l -

96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 21 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - 6,2

mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - activated sludge - 488,6 mg/l - 3 h

(OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability Result: 95 % - Readily biodegradable.

(OECD Test Guideline 301E)

12.3 Bioaccumulative potential

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

Further information

Not classified as dangerous in the meaning of transport regulations.

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

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties ofthe product. ChemicalBull Pvt Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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