

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### SECTION 1: Identification

#### 1.1 Identification

Product form	:	Substance
Substance name	:	DIBUTYL ITACONATE
CAS No	:	2155-60-4
EC/ List No	:	218-451-9
Formula	:	C <sub>13</sub> H <sub>22</sub> O <sub>4</sub>
Molecular weight	:	242.313 g/mol
Synonyms	:	Butanedioic acid, 2-methylene-, 1,4-dibutyl ester

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

Use of the substance/mixture : For thermoplastic manufacture.

#### 1.3 Details of the supplier of the safety data sheet

Godavari Biorefineries Ltd.  
45/47, Somaiya bhavan,  
Mahatma Gandhi Road,  
Fort, Mumbai -400001, INDIA..  
T 0091 22 61702100/22048272  
Email: [alka@somaiya.com](mailto:alka@somaiya.com)  
[www.somaiya.com](http://www.somaiya.com)

#### 1.4 Emergency telephone Number

Emergency number : 0091 2423 279308  
0091 22 61702100/22048272 (Monday – Friday - 09.30 hrs to 18.00)

### SECTION 2: Hazard(s) identification

#### GHS classification

##### 2.1 Classification of the substance or mixture

This substance is not hazardous in accordance with paragraph (d) of §1910.122155-60-4 (GHS-US classification). : Not Classified

##### 2.2 GHS labeling

Hazard pictograms	:	Not a hazardous substance
Signal word	:	None
Hazard statements	:	Not a hazardous substance
Precautionary statements	:	Not a hazardous substance

##### 2.3 Other hazards

Other hazards not contributing to the classification : 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.

##### 2.4 Unknown acute toxicity (GHS US)

Not applicable.

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### SECTION 3: Composition/Information on ingredients

#### 3.1 Substance

Substance type : Mono-constituent

Name	Product identifier CAS No EC No	Concentration %	GHS classification
DIBUTYL ITACONATE (Main constituent)	2155-60-4 218-451-9	Min. 99.00	Not a hazardous substance

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

#### 3.2 Mixture

None

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

<b>General information</b>	:	First aid personnel should pay attention to their own safety. Wear proper personal protective equipments. Do not leave affected persons unattended
Inhalation	:	Remove the victim into fresh air and supply artificial breathing if necessary.
Skin contact	:	Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing.
Eye contact	:	Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Protect unharmed eye.
Ingestion	:	Rinse mouth with water. Immediately after ingestion: give lots of water to drink.

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

Symptoms/injuries after inhalation	:	None reported
Symptoms/injuries after skin contact	:	None reported
Symptoms/injuries after eye contact	:	None reported
Symptoms/injuries after ingestion	:	None reported
Chronic symptoms	:	None reported

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

Seek medical assistance. Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media	:	CO <sub>2</sub> , dry chemical, foam Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### 5.2 Special hazards arising from the substance or mixture

Fire hazard	:	In case of fires, hazardous products are formed: Carbon monoxide (CO), Carbon dioxide(CO <sub>2</sub> ).
Explosion hazard	:	None
Reactivity	:	Under conditions giving incomplete combustion, hazardous gases produced may consists of CO and CO <sub>2</sub> .

### 5.3 Advice for firefighters

Firefighting instructions	:	Cool tanks/drums with water spray/remove them into safety location. Do not move the load if exposed to heat. Use water moderately and if possible, collect or contain it.
Protection during firefighting	:	Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

Protective equipment	:	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Emergency procedures	:	Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop nearby engines and no smoking. No naked flames or sparks. Keep containers closed. Wash contaminated clothes.

#### 6.1.2 For Emergency responders

Protective equipment	:	Equip cleanup crew with proper protection. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Emergency procedures	:	Stop leak if safe to do so. Ventilate area.

### 6.2 Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers, water bodies. Do not allow product to reach sewage system or any water course.

### 6.3 Methods and material for containment and cleaning up

For containment	:	Contain released substance, transfer (pump) into suitable containers. Use compatible material of containers. Do not use compressed air for pumping over spills.
Methods for cleaning up	:	Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/ authorized disposal facility. Wash clothing and equipment after handling.

### 6.4 Reference to other sections

No additional information available.

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Precautions for safe handling	:	Comply with the legal requirements. Provide sufficient air exchange and or exhaust in work rooms. Remove contaminated clothing immediately. Clean contaminated clothing. Do not discharge the waste into the drain. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Keep container tightly closed.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2 Conditions for safe storage, including any incompatibilities

Incompatible products	:	Oxidizing agent, Reducing agents
Incompatible materials	:	Direct sunlight. Heat sources. Sources of ignition.
Prohibitions on mixed storage	:	KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents.
Storage area	:	Store in a dry area. Ventilation at floor level. Keep out of direct sunlight. Fireproof storeroom. Keep locked up. Meet the legal requirements. Avoid moisture. Keep container tightly sealed.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packaging in solid containers.

#### 7.3 Specific end uses

No data available.


### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### 8.1.1 Occupational exposure limits:

Exposure limits not established in US.

#### 8.2 Exposure controls

Appropriate engineering controls	:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Material should be handled in a laboratory hood/chemical dispensing area whenever possible.
Personal protective equipment	:	 <p>Protective Gloves. .</p>
Materials for protective clothing	:	GIVE EXCELLENT RESISTANCE
Eye protection	:	Eye wash bottle with pure water.
Skin and body protection	:	Head/neck protection. Corrosion-proof clothing, protective suit .
Respiratory protection	:	Use appropriate respiratory device when necessary. Use NIOSH/MSHA approved respirator appropriate for exposure of concern

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear Liquid
Colour	:	Colourless
Odour	:	Not determined
Melting point	:	-20°C
Freezing point	:	No Data Available
Initial boiling point/boiling range	:	222° C
Flash Point	:	136 °C (276.8 °F)
Specific Gravity / Relative density	:	0.984 to 0.986 at 20°C
Molecular mass	:	242.31 g/mol
Flammability(Solid, Gas)	:	Non- Flammable
Solubility	:	0.0748 g/l
Vapor pressure	:	0.19 Pa (25 °C)
Partition coefficient n-octanol/water	:	3.8(log Pow)
Auto-ignition temperature	:	275 °C (527 °F)
Viscosity	:	5.55 mm <sup>2</sup> /s at 20°C
Oxidizing properties	:	Non oxidising

#### 9.2 Other information

No data available.

### SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	:	Upon combustion: CO and CO <sub>2</sub> are formed. Stable at ambient temperature and under normal conditions of use.
<b>10.2 Chemical Stability</b>	:	Stable under recommended storage conditions
<b>10.3 Possibility of hazardous reactions</b>	:	No hazardous reactivity has been reported.
<b>10.4 Conditions to avoid</b>	:	Extremely high temperatures. Incompatible materials and moisture
<b>10.5 Incompatible materials</b>	:	May react with Strong oxidizing agents, Reducing agents.
<b>10.6 Hazardous decomposition products</b>	:	Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known and may form mixture of hazardous gas of Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Likely routes of exposure	:	Ingestion, Inhalation; Skin and eye contact
Acute toxicity	:	Based on available data, the classification criteria are not met.

<b>DIBUTYL ITACONATE (2155-60-4)</b>		
LD50 oral toxicity		>2000 mg/kg bw (rat) (Acute Toxicity: oral)
Skin irritation	:	Not classified

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Handle in accordance with good industrial hygiene and safety practice.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Ecology – general	:	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/22155-60-48.
Ecology – air	:	Not classified as dangerous for the ozone layer (Regulation (EC) No 12155-60-45/22155-60-49).
Ecology – water	:	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/22155-60-48.

DIBUTYL ITACONATE (2155-60-4)				
	Short-term toxicity to fish	Short-term toxicity to aquatic invertebrates	Toxicity to Microorganisms	Toxicity to aquatic algae and cyanobacteria
Species	Cyprinus carpio	Daphnia magna	Activated sludge of a predominantly domestic sewage	Raphidocelis subcapitata
Value	LC 50: 1.5 mg/LI	EC50=19 mg/L	EC 50: >1000mg/l	EC50: 6.9 mg/l
Exposure time	96 h	48 h	3h	72 h
Test method: OECD	203	202	209	201

#### 12.2 Persistence and degradability

##### DIBUTYL ITACONATE (2155-60-4)

Persistence and degradability	:	Readily biodegradable in water. Biodegradable in the soil. 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
-------------------------------	---	--

#### 12.3 Bioaccumulative potential

##### DIBUTYL ITACONATE (2155-60-4)

Log Pow	:	3.8 ( at 25 °C) (Experimental value)
Bioaccumulative potential	:	339 L/kg (estimated based on QSAR of Veith et al (1979))

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### 12.4 Mobility in soil

#### DIBUTYL ITACONATE (2155-60-4)

Surface tension	:	Waiving
Ecology – soil	:	No adverse impacts.

### 12.5 Results of PBT and vPvB assessment

No data available.

### 6 Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste disposal recommendations : Remove and dispose waste in accordance with local and/or national regulations. Recommended practice of physico-chemical/biological treatment and authorized waste incinerator for solvents with energy recovery. Do not discharge into drains or the environment.

## SECTION 14 : TRANSPORT INFORMATION

### Marine transport (IMDG)

UN/ID No. : Not regulated  
 Proper shipping name : DIBUTYL ITACONATE  
 Hazard Class : -  
 Subsidiary Risk : -  
 Packing group : -  
 Marine pollutant : -  
 Hazard Labels : -  
 EMS Code : -

### Air transport ICAO/IATA

UN number : Not regulated  
 Proper shipping name : DIBUTYL ITACONATE  
 Hazard Class : -  
 Subsidiary Risk : -  
 Packing group : -  
 Hazard Labels : -

### Department of Transportation (DOT)

UN number : Not regulated  
 Proper shipping name and description : -  
 Class : Not Dangerous goods  
 Packaging group : -  
 Reportable Quantity (RQ) : -  
 Poison Inhalation Hazard : No  
 Hazard labels : -

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

### SECTION 15: Regulatory information

#### 15.1 National regulations

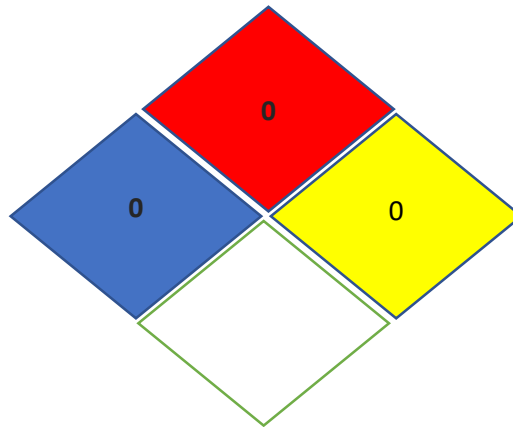
Country	National Inventories	Listing
DANISH	DK-EPA	Listed
CHINA	IECSC	Listed
EUROPE	EU	Listed
TAIWAN	TCSI	Listed

### SECTION 16: Other information

#### 16.1 Hazard Statement

: Not a hazardous substance.

#### 16.2 NFPA Rating



#### 16.3 Abbreviations and acronyms

- PBT =Persistent Bioaccumulative and Toxic
- vPvB= Very Persistent and Very Bioaccumulative
- SCBA= Self Contained Breathing Apparatus
- NIOSH REL= National Institute for Occupational Safety and Health Recommended Exposure Limit
- OSHA PEL=Occupational Safety and Health Administration Permissible Exposure Limit
- OELTWA= Occupational Exposure Limit Time Weighted Averages
- IDLH= Immediately Dangerous to Life or Health
- UEL= Upper Explosive Limit
- LEL= Lower Explosive Limit
- RTECS= Registry of Toxic Effects of Chemical Substances
- NTP=National Toxicology Programm

# DIBUTYL ITACONATE

## Safety Data Sheet

Supersedes: 12/12/2023

Revision: 1.3

Revision date: 15/04/2025

IARC= International Agency for Research on Cancer  
EPA=Environmental Protection Agency  
TSCA= Toxic Substances Control Act  
NFPA= National Fire Protection Association  
CSR=Chemical Safety Report  
BCF = Bio Concentration Factor  
DNEL = Derived No Effect Level  
PNEC = Predicted No Effect Concentration  
TLV = Threshold Limit Value  
ACGIH = American Conference of Governmental Industrial Hygienist  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
CLP = Classification, Labelling and Packaging  
LD / LC = Lethal Doses / Lethal Concentration  
GHS = Globally Harmonised System  
ADR = Accord européen relative au transport international de marchandises  
IMDG-Code = International Maritime Code for Dangerous Goods  
EmS = Emergency measures on Sea  
ICAO = International Civil Aviation Organization  
IATA/DGR= International Air Transport Association/Dangerous Goods Regulation

### 16.4 Further information:

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Godavari Biorefineries Ltd assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application