

## SAFETY DATA SHEET

## DiOC6(3) (3,3'-dihexyloxacarboyanine iodide)

## SECTION 1: Identification

## 1.1. Product identifier

## Trade name

DiOC6(3) (3,3'-dihexyloxacarboyanine iodide)

## Other names / Synonyms

70009- DiOC6(3) (3,3'-dihexyloxacarboyanine iodide), 100 mg

## Product no.

70009

## Other means of identification

CAS No.: 53213-82-4

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

## Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

Restricted to professional users.

## Uses advised against

None known.

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

## Company and address

**Biotium, Inc.**

46117 Landing Parkway

CA 94538 Fremont

USA

T: +1 510-265-1027

Fax: +1 510-265-1352

<http://www.biotium.com>

## E-mail

[techsupport@biotium.com](mailto:techsupport@biotium.com)

## SDS date

5/3/2024

## SDS Version

1.0

## 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](http://triage.webpoisoncontrol.org)) to get specific guidance for your case

See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

## OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

## 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H335, May cause respiratory irritation.

## 2.2. Label elements

## Hazard pictogram(s)



**Signal word**

Warning

**Hazard statement(s)**

Causes skin irritation. (H315)

Causes serious eye irritation. (H319)

May cause respiratory irritation. (H335)

**Precautionary statement(s)**

**General**

-

**Prevention**

Avoid breathing dust. (P261)

Wash hands thoroughly after handling. (P264)

Wear eye protection/face protection/protective gloves. (P280)

**Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

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

If eye irritation persists: Get medical advice/attention. (P337+P313)

**Storage**

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

**Disposal**

Dispose of contents/container in accordance with local regulation (P501)

**Additional labelling**

Not applicable.

**2.3. Other hazards**

**Additional warnings**

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

**SECTION 3: Composition/Information on Ingredients**

**3.1. Substances**

Product/substance	Identifiers	% w/w	Classification	Note
3,3'-Dihexyloxycarbocyanine iodide	CAS No.: 53213-82-4	70-100%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	

**3.2. Mixtures**

Not applicable. This product is a substance.

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

**Other information**

-

**SECTION 4: First-aid measures**

**4.1. Description of first aid measures**

**General information**

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

**Inhalation**

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

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

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage temperature

Keep container tightly closed in a dry and well-ventilated place.

Refrigerator 2°C to 8°C.

Protect from light.

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

### 8.2. Exposure controls

Apply general control to prevent unnecessary exposure

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

#### Hygiene measures

Take off contaminated clothing and wash it before reuse.

#### Measures to avoid environmental exposure

No specific requirements.

### Individual protection measures, such as personal protective equipment

#### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

#### Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



#### Skin protection

No specific requirements.

#### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
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			



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
and good laboratory practices. Wash and dry hands.			
<b>Eye protection</b>			
<b>Type</b>	<b>Standards</b>		
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	EN166		



## SECTION 9: Physical and chemical properties

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

#### Physical state

Solid

#### Colour

Orange

#### Odour

Testing not relevant or not possible due to the nature of the product.

#### Odour threshold (ppm)

Testing not relevant or not possible due to the nature of the product.

#### pH

Testing not relevant or not possible due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

Testing not relevant or not possible due to the nature of the product.

#### Kinematic viscosity

Does not apply to solids.

#### Particle characteristics

Testing not relevant or not possible due to the nature of the product.

#### Phase changes

##### Melting point (°F)

Testing not relevant or not possible due to the nature of the product.

##### Softening point/range (waxes and pastes) (°F)

Does not apply to solids.

##### Boiling point (°F)

Does not apply to solids.

##### Vapour pressure

Testing not relevant or not possible due to the nature of the product.

##### Relative vapour density

Does not apply to solids.

##### Decomposition temperature (°F)

Testing not relevant or not possible due to the nature of the product.

#### Data on fire and explosion hazards

##### Flash point (°F)

Does not apply to solids.

##### Flammability (°F)

Testing not relevant or not possible due to the nature of the product.

##### Auto-ignition temperature (°F)

Testing not relevant or not possible due to the nature of the product.

##### Explosion limits (% v/v)

Does not apply to solids.

## Solubility

### Solubility in water

Soluble in DMSO or DMF

### n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to the nature of the product.

### Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

## 9.2. Other information

### Other physical and chemical parameters

No data available.

### Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/irritation

Causes serious eye irritation.

#### Respiratory sensitisation

Based on available data, the classification criteria are not met.

#### Skin sensitisation

Based on available data, the classification criteria are not met.

#### 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

Based on available data, the classification criteria are not met.

#### STOT-single exposure

May cause respiratory irritation.

#### 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.

#### Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available.

### 12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

### 12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Other adverse effects

None known.

## SECTION 13: Disposal considerations

### RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

### Specific labelling

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

### Additional information

Not dangerous goods according to DOT, IATA and IMDG.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2. U.S. Federal regulations

#### TSCA (the non-confidential portion)

3,3'-Dihexyloxacarboyanine iodide is listed

#### Clean Air Act

None of the components are listed

#### EPCRA Section 302

None of the components are listed

#### EPCRA Section 304

None of the components are listed

#### EPCRA section 313

None of the components are listed

#### CERCLA

None of the components are listed

#### State regulations

##### California / Prop. 65

None of the components are listed

##### Massachusetts / Right To Know Act

None of the components are listed

##### New Jersey / Right To Know Act

None of the components are listed

##### New York / Right To Know Act

None of the components are listed

##### Pennsylvania / Right To Know Act

None of the components are listed

#### 15.4. Restrictions for application

Restricted to professional users.

#### 15.5. Demands for specific education

No specific requirements.

#### 15.6. Additional information

Not applicable.

#### 15.7. Chemical safety assessment

No

#### 15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number



SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

#### The safety data sheet is validated by

Julianne Davis

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en