

**IOPROMIDE (N-METHYL-D3, 98%)** Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 14/02/2020 Revision date: Version: 1.0 DLM-10541

	ubstance/mixture and of the company/undertaking
1.1. Product identifier	Culture
Product form	
Substance name EC-No.	: IOPROMIDE (N-METHYL-D3, 98%) : 277-385-9 (Unlabeled)
CAS-No.	: 1189947-73-6
Product code	: DLM-10541
Formula	: C18H21D3I3N3O8
1.2. Relevant identified uses of the su	bstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Industrial/Professional use spec	: For professional use only
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safe	ty data sheet
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810	
USA	
USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com	
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)	
<b>SECTION 2: Hazards identification</b>	
2.1. Classification of the substance of	r mixture
Classification according to Regulation (EC	) No. 1272/2008 [CLP]
Aquatic Acute 1 H400	
Aquatic Chronic 1 H410	
Full text of hazard classes and H-statements : see section 16	
Classification according to Directive 67/54	
N; R50/53	
Full text of R-phrases: see section 16	
·	
GHS-US classification	
Aquatic Acute 1 H400 Aquatic Chronic 1 H410	
Full text of H statements : see section 16	
Adverse physicochemical, human health and environmental effects	
No additional information available	
2.2. Label elements	
Labeling according to Regulation (EC) No.	1272/2008 [CLP]
Hazard pictograms (CLP)	

GHS09

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Signal word (CLP)	: Warning
Hazard statements (CLP)	: H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (CLP)	<ul> <li>P273 - Avoid release to the environment.</li> <li>P391 - Collect spillage.</li> <li>P501 - Dispose of contents/container to Comply with local regulations for disposal</li> </ul>
GHS-US labeling	
Hazard pictograms (GHS-US)	

:	¥_2
	GHS09
:	Warning

Signal word (GHS-US) Hazard statements (GHS-US)

Precautionary statements (GHS-US)

: P273 - Avoid release to the environment.

: H410 - Very toxic to aquatic life with long lasting effects

P391 - Collect spillage.

P501 - Dispose of contents/container to Comply with applicable regulations

100

### 2.3. **Other hazards**

No additional information available

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

3.1. Substances		
Name	Product identifier	%
IOPROMIDE (N-METHYL-D3, 98%)	(CAS-No.) 1189947-73-6 (EC-No.) 277-385-9 (Unlabeled)	100
Name	Product identifier	%

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
IOPROMIDE (N-METHYL-D3, 98%) (Main constituent)	(CAS-No.) 1189947-73-6	100	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

(EC-No.) 277-385-9 (Unlabeled)

(CAS-No.) 1189947-73-6

Full text of H-phrases: see section 16

IOPROMIDE (N-METHYL-D3, 98%)

### **Mixtures** 3.2.

Not applicable	
<b>SECTION 4: First aid measures</b>	
4.1. Description of first aid measur	es
First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2. Most important symptoms and	l effects, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate m	edical attention and special treatment needed
No additional information available	
14/02/2020	EN (English LIC)

**Classification according to** Directive 67/548/EEC

**Classification according to** Regulation (EC) No. 1272/2008 [CLP]

Aquatic Acute 1, H400 (M=10)

Aquatic Chronic 1, H410

N; R50/53

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20, 2012 / 10	ules and Regulations	
SECTIO	ON 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable e	extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
5.2.	Special hazards arising from the sub	stance or mixture
No additic	onal information available	
5.3.	Advice for firefighters	
-	ng instructions	: Wear self contained breathing apparatus for fire fighting if necessary.
Protectior	n during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTIC	ON 6: Accidental release meas	sures
6.1.	Personal precautions, protective equ	lipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emergeno	cy procedures	: Use protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate
		ventilation. Evacuate personnel to safe areas.
6.1.2.	For emergency responders	
No additio	onal information available	
6.2.	Environmental precautions	
Prevent fu	urther leakage or spillage if safe to do so	b. Do not let product enter drains. Discharge into the environment must be avoided.
6.3.	Methods and material for containme	nt and cleaning up
For contain	inment	: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
Methods f	for cleaning up	: Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4.	Reference to other sections	
No additio	onal information available	
SECTIO	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Additional	I hazards when processed	: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Precautio	ns for safe handling	<ul> <li>Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.</li> </ul>
Hygiene r	measures	<ul> <li>Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.</li> </ul>
7.2.	Conditions for safe storage, includin	g any incompatibilities
Technical	I measures	: Keep container tightly closed in a cool, dry and well-ventilated place.
Storage c	conditions	: Store in freezer (-20°C). Protect from light.
7.3.	Specific end use(s)	
No additio	onal information available	
SECTIO	ON 8: Exposure controls/perso	onal protection
8.1.	Control parameters	
No additio	onal information available	
	Exposure controls	
Appropria	ate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Personal	protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Materials	for protective clothing	: Wear suitable protective clothing and gloves.
Hand prot	tection	: Wear suitable protective clothing and gloves.
Eye prote		: Wear eye protection. Chemical goggles or face shield with safety glasses.
	body protection	: Wear suitable protective clothing, gloves and eye/face protection.
Respirato	bry protection	: In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Environmental exposure controls

: Avoid release to the environment.

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	
Physical state	: Solid
Appearance	: Powder
Molecular mass	: 794.13 g/mol (Labeled)
Color	: White to light yellow
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivit	V
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable if stored under recommended conditions	3.
10.3. Possibility of hazardous reactions	
No additional information available	
10.4. Conditions to avoid	
Not available.	
10.5. Incompatible materials	
Strong oxidizing agents.	
10.6. Hazardous decomposition product	
Carbon oxides, Nitrogen oxides. Hydrogen iodi	de.
<b>SECTION 11: Toxicological informa</b>	ntion
11.1. Information on toxicological effect	S
Acute toxicity	: Not classified
IOPROMIDE (N-METHYL-D3, 98%) (118994	7-73-6)
Additional information	LD50 Intravenous - Rat - 21,403 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Germ cell mutagenicity Carcinogenicity	: Not available : Not classified
Reproductive toxicity Specific target organ toxicity – single exposure	: Not available : Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Ecology - general	: Very toxic to aquatic life with long lasting effects.
IOPROMIDE (N-METHYL-D3, 98%) (1189947-	-73-6)
LC50 fish 1	0.01 - 10000 mg/l - Danio rerio (zebra fish) - 96 h
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	nt
No additional information available	
12.6. Other adverse effects	
Other adverse effects	: An environmental hazard cannot be excluded in the event of unprofessional handling or
	disposal. Very toxic to aquatic life with long lasting effects.
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local
5 5 ( <i>)</i>	environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed
Ecology - waste materials	professional waste disposal service to dispose of this material. : Dispose of as unused product.
Looogy - waste materials	. Dispose of as unused product.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / A	DN
14.1. UN number	
UN-No.(DOT)	: 3077
DOT NA no.	UN3077
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Environmentally hazardous substances, solid, n.o.s.
Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)
DOT Symbols	: G - Identifies PSN requiring a technical name
14/02/2020	FN (Faction 10) E(0

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Packing group (DOT)	: III - Minor Danger
Packing group (DOT) DOT Special Provisions (49 CFR 172.102)	<ul> <li>III - Minor Danger</li> <li>8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.</li> <li>146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.</li> <li>335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit muts be leak-proof when used as bulk packaging.</li> <li>A112 - Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:</li> <li>a. Metal: 11A, 11B, 11N, 21A, 21B and 21N</li> <li>b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2</li> <li>c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2</li> <li>d. Fiberboard: 11G</li> <li>e. Wooden: 11C, 11D and 11F (with inner liners)</li> <li>f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be filtpord and water resistant liner).</li> <li>B54 - Open-top, sift-proof rail cars are also authorized.</li> <li>IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H1, 21H1, 21H1, 21H2, 21H2, 13H2, 13H3, 13H4, 13H5, 13L1, 13L</li></ul>
	or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material
	must be transported in accordance with the applicable requirements of this subchapter.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 213
DOT Packaging Bulk (49 CFR 173.xxx)	: 240
Marine pollutant	: No



: No supplementary information available.
: DOT: Not dangerous goods.
: 111
: 9 - Miscellaneous dangerous substances and articles
: 90
: M7

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (ADR)	: 9 - Miscellaneous dangerous substances and articles
Orange plates	90 3077
Tunnel restriction code (ADR)	: E
Limited quantities (ADR)	5kg
EAC	: 2Z
Excepted quantities (ADR)	: E1
Transport by sea	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
MFAG-No	: 171
Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
Civil Aeronautics Law	: Miscellaneous dangerous substances & articles
14.4. Environmental hazards	
Dangerous for the environment	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: DOT: Not dangerous goods.
-1	
14.6. Transport in bulk according to Anne	x II of MARPOL 73/78 and the IBC Code
Not applicable	

SECTION 15: Regulatory information				
15.1. US Federal regulations				
IOPROMIDE (N-METHYL-D3, 98%) (1189947-	-73-6)			
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.			
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.			
15.2. International regulations				

### CANADA

IOPROMIDE (N-METHYL-D3, 98%) (1189947-73-6)	
Listed on the Canadian DSL (Domestic Substances List)	

### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

IOPROMIDE (N-METHYL-D3, 98%)(1189947-73-6)	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IOPROMIDE (N-METHYL-D3, 98%)(1189947-73-6)	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List

## **SECTION 16: Other information**

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

### Full text of R-, H- and EUH-phrases:

	- ,			
A	quatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1		
A	quatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1		
H	400	Very toxic to aquatic life		
H	410	Very toxic to aquatic life with long lasting effects		
R	50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment		
N		Dangerous for the environment		
		·		
NFPA he	ealth hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.		
NFPA fir	re hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.		
NFPA re	eactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.		
Hazard	Rating			
Health		: 0 Minimal Hazard - No significant risk to health		
Flamma	bility	: 0 Minimal Hazard		
Physical		: 0 Minimal Hazard		
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### CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product