



BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

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: 13/06/2018

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Version: 1.0

CLM-6238-MT-S

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

1.1. Product identifier

Product form : Mixtures
Product name : BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE
Product code : CLM-6238-MT-S

1.2. Relevant identified uses of the substance 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 safety 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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Carc. 2 H351

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
Xi; R38
Carc.Cat.3; R40

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Carc. 2 H351

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Central nervous system. Kidneys.

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2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS08

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H351 - Suspected of causing cancer (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P302+P352 - If on skin: Wash with plenty of water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see Hazardous component(s) for labeling on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use Water spray, Alcohol resistant foam, Dry chemical, Carbon dioxide. to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

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3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4 (EC-No.) 216-653-1 (EC Index-No.) 603-181-00-X (REACH-no) 01-2119452786-27	99.986488	F; R11 Xi; R38
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) substance listed as REACH Candidate (Bis (2-ethyl(hexyl)phthalate) (DEHP)) substance listed in REACH Annex XIV (Bis(2-ethylhexyl) phthalate (DEHP))	(CAS-No.) 117-81-7 (Unlabeled) (EC-No.) 204-211-0 (EC Index-No.) 607-317-00-9	0.013512	N; R50/53 Carc.Cat.1; R45 Carc.Cat.1; R49 Repr.Cat.1; R60 Repr.Cat.1; R61

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4 (EC-No.) 216-653-1 (EC Index-No.) 603-181-00-X (REACH-no) 01-2119452786-27	99.986488	Flam. Liq. 2, H225 Skin Irrit. 2, H315
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) substance listed as REACH Candidate (Bis (2-ethyl(hexyl)phthalate) (DEHP)) substance listed in REACH Annex XIV (Bis(2-ethylhexyl) phthalate (DEHP))	(CAS-No.) 117-81-7 (Unlabeled) (EC-No.) 204-211-0 (EC Index-No.) 607-317-00-9	0.013512	Carc. 1A, H350 Carc. 1A, H350i Repr. 1A, H360FD Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4	99.986488	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Carc. 2, H351
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%)	(CAS-No.) 117-81-7 (Unlabeled)	0.013512	Carc. 1B, H350 Repr. 1A, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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

Symptoms/effects	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes 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 medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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Other information : Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Provide adequate ventilation to minimize dust and/or vapor concentrations. Avoid dust formation. Evacuate area. Remove all sources of ignition. Special attention should be given to low areas/pits where flammable vapors can accumulate.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray, vapors. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Prevent the build-up of electrostatic charge. Provide adequate ventilation to minimize dust and/or vapor concentrations.

Hygiene measures : 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

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) Remarks: Upper Respiratory Tract irritation. Kidney damage. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	144 mg/m ³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
USA OSHA	OSHA PEL (Ceiling) (ppm)	40 ppm Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ Lower Respiratory Tract irritation. Confirmed animal carcinogen.
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³ Potential Occupational Carcinogen
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³ Potential Occupational Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

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METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) Remarks: Upper Respiratory Tract irritation. Kidney damage. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	144 mg/m ³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
USA OSHA	OSHA PEL (Ceiling) (ppm)	40 ppm Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).

8.2. Exposure controls

Appropriate 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 protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state	: Liquid
Appearance	: Liquid
Molecular mass	: 88.15 g/mol
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -108.6 °C (-163.5 °F)
Freezing point	: No data available
Boiling point	: 55 - 56 °C (131 - 133 °F) - lit.
Flash point	: -33 °C (- 27.4 °F) - closed cup
Auto-ignition temperature	: 374 °C (705.2 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 1018.7 hPa (764.1 mmHg) at 55°C (131°F), 279.2 hPa (209.4 mmHg) at 20 °C (68°F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.74 g/ml at 25 °C (77 °F)
Solubility	: Water: 42 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Log Pow	: 1.06
Log Kow	: No data available
Viscosity, kinematic	: 0.464 mm ² /s at 20 °C (68 °F) - 0.409 mm ² /s at 40 °C (104 °F)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 1.6 - 15.1 % (V)

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE	
LD50 oral rat	4000 mg/kg
LC50 inhalation rat (ppm)	23576 ppm/4h
ATE CLP (oral)	4000.000 mg/kg body weight
ATE CLP (gases)	23576.000 ppmV/4h

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
LD50 oral rat	30000 mg/kg
LD50 dermal rabbit	25000 mg/kg
ATE CLP (oral)	30000.000 mg/kg body weight
ATE CLP (dermal)	25000.000 mg/kg body weight

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
LD50 oral rat	4000 mg/kg
LC50 inhalation rat (ppm)	23576 ppm/4h

Skin corrosion/irritation	: Causes skin irritation. Skin Rabbit Causes skin irritation
Serious eye damage/irritation	: Not classified Eyes Rabbit No eye irritation
Respiratory or skin sensitization	: Will not occur
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: 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. central nervous system. Dizziness. Nausea. Vomiting. IF INHALED: Risk of pneumonia.
IARC group	: 2B
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

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SECTION 12: Ecological information

12.1. Toxicity

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE	
LC50 fish 1	672 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	472 mg/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	491 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h
LC50 fish 2	> 1000 mg/l other fish - 96 h
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
LC50 fish 1	> 0.67 mg/l Pimephales promelas (fathead minnow) - 96 h
LC50 other aquatic organisms 1	> 0.17 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	> 0.2 mg/l Lepomis macrochirus (Bluegill) - 96 h
LC50 fish 2	> 0.32 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
NOEC (acute)	> 0.3 mg/l 96 h
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
LC50 fish 1	672 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	472 mg/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	491 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h
LC50 fish 2	> 1000 mg/l other fish - 96 h

12.2. Persistence and degradability

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE	
Persistence and degradability	Not readily biodegradable. (OECD 301D method).
Biodegradation	0 %
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
Persistence and degradability	Not available.
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Persistence and degradability	Not readily biodegradable. (OECD 301D method).
Biodegradation	0 %

12.3. Bioaccumulative potential

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE	
Log Pow	1.06
BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
BCF fish 1	0.014 mg/l Oncorhynchus mykiss (rainbow trout) - 100 d
Bioconcentration factor (BCF REACH)	113
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Log Pow	1.06

12.4. Mobility in soil

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
- Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

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Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 2398
DOT NA no. UN2398

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methyl tert-butyl ether
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT RQ : 1000 lbs
Marine pollutant : No

14.3. Additional information

Emergency Response Guide (ERG) Number : 127
Other information : No supplementary information available.
Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

Overland transport

Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Hazard labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number "33" in black. The bottom section contains the number "2398" in black.

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 11
EAC : •3YE
Excepted quantities (ADR) : E2

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Transport by sea

DOT Vessel Stowage Location : E - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded.

MFAG-No : 127

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L
CFR 175.75)

Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))

Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)

Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

15.2. International regulations

CANADA

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

Listed on the Canadian DSL (Domestic Substances List)

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))

Listed on the Canadian DSL (Domestic Substances List)

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

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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

15.3. US State regulations

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE	
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
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	Yes	

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2, DICARBOXYL-13C2, 99%) (117-81-7 (Unlabeled))	
State or local regulations	
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List	

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
State or local regulations	
U.S. - Massachusetts - Right To Know List 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:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 1A	Carcinogenicity (inhalation) Category 1A
Carc. 2	Carcinogenicity Category 2
Flam. Liq. 2	Flammable liquids Category 2
Repr. 1A	Reproductive toxicity Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H350	May cause cancer
H350i	May cause cancer by inhalation.
H351	Suspected of causing cancer
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable

BIS(2-ETHYLHEXYL)PHTHALATE (RING-1,2-13C2,DICARBOXYL-13C2, 99%)100 UG/ML MTBE

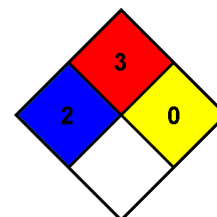
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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R45	May cause cancer
R49	May cause cancer by inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R60	May impair fertility
R61	May cause harm to the unborn child
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 3 Serious Hazard
- Physical : 0 Minimal Hazard

CIL Mixture 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