

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: 07/07/2017
 Revision date:
 :
 Version: 1.0

 ULM-10316-S

	bstance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Mixtures	
Product name	: 1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE	
Product code	: ULM-10316-S	
1.2. Relevant identified uses of the sul	ostance 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 safet	y data sheet	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA		
USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> 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		
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+; R12 Xi; R38 Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225 Skin Irrit. 2 H315 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Eyes, Kidney, Liver, Heart, Central nervous system. Highly flammable liquid and vapor. Causes skin irritation.

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

2.2. Label elements	
Labeling according to Regulation (EC) N	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS07
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapor H315 - Causes skin irritation
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 both hands 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
GHS-US labeling	
Hazard pictograms (GHS-US)	
Signal word (GHS-US)	GHS02 GHS07 : Danger
• • • •	с. С
Hazard statements (GHS-US)	: H225 - Highly flammable liquid and vapor H315 - Causes skin irritation
Precautionary statements (GHS-US)	: P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking
	P233 - Keep container tightly closed
	P240 - Ground/Bond container and receiving equipment
	P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge
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	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands thoroughly after handling P280 - Wear eye protection, face protection, protective clothing, protective gloves
	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands 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
	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands 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
	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands thoroughly after handling P280 - Wear eye protection, face protection, protective clothing, protective gloves P303+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 P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
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	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands 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 P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water
	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands 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 P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water spray to extinguish
	 P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Both hands 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 P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water

Other hazards 2.3.

No additional information available

SECT	ION 3: Composition/Informatio	n on ingredients		
3.1.	Substances			
Not app	blicable			
3.2. Mixtures				
Name)	Product identifier	%	Classification according to Directive 67/548/EEC
METH	YL 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	99.987	F; R11 Xi; R38
07/07/20	017	EN (English US)		2/10

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

Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2- ETHYLHEXYL) ESTER (UNLABELED)	(CAS No) 63468-10-0	0.013	Xn; R22
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	99.987	Flam. Liq. 2, H225 Skin Irrit. 2, H315
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2- ETHYLHEXYL) ESTER (UNLABELED)	(CAS No) 63468-10-0	0.013	Acute Tox. 4 (Oral), H302
Name	Product identifier	%	GHS-US classification
METHYL TERT-BUTYL ETHER UNLABELED	(CAS No) 1634-04-4	99.987	Flam. Liq. 2, H225 Skin Irrit. 2, H315
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2- ETHYLHEXYL) ESTER (UNLABELED)	(CAS No) 63468-10-0	0.013	Acute Tox. 4 (Oral), H302

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

SECTION 4. First aid measures			
SECTION 4: First aid measures			
4.1. Description of first aid measur			
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.		
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. 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. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get 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. Call a poison center/doctor/physician if you feel unwell.		
4.2. Most important symptoms and	l effects, both acute and delayed		
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.		
Symptoms/injuries after skin contact	: Causes skin irritation.		
Symptoms/injuries after eye contact	: May cause eye irritation.		
Symptoms/injuries after ingestion	: May be harmful if swallowed.		
4.3. Indication of any immediate m	edical attention and special treatment needed		
Treat symptomatically.			
SECTION 5: Firefighting measur	es		
5.1. Extinguishing media			
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray.		
5.2. Special hazards arising from t	ne substance or mixture		
Reactivity	: Highly flammable liquid and vapor.		
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. Do not attempt to take action without suitable protective equipment. Self-contained breathing		

apparatus. Complete protective clothing.

: Use water spray to cool exposed surfaces.

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

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency	personnel		
	ency procedures	: Ventilate spillage are mist, gas. Provide ar dust formation. Evac given to low areas/p	ea. Use personal protective equipment as required. Avoid breathing vapors, lequate ventilation to minimize dust and/or vapor concentrations. Avoid uate area. Remove all sources of ignition. Special attention should be ts where flammable vapors can accumulate. No open flames, no sparks, bid contact with skin and eyes.	
6.1.2.	For emergency resp	onders		
Protec	tive equipment		e action without suitable protective equipment. For further information xposure controls/personal protection".	
6.2.	Environmental preca	utions		
Avoid	release to the environmer	t. Prevent entry to sewers and public wa	ers.	
6.3.	Methods and materia	I for containment and cleaning up		
For co	ntainment	: Collect spillage. This local legislation.	material and its container must be disposed of in a safe way, and as per	
Metho	ds for cleaning up		to absorbent material. Notify authorities if product enters sewers or public and its container must be disposed of in a safe way, and as per local	
Other	information	: Dispose of materials	or solid residues at an authorized site.	
6.4.	Reference to other s	ections		
For fu	ther information refer to s	ection 13.		
SEC	ΓΙΟΝ 7: Handling ar	id storage		
7.1.	Precautions for safe			
Precau	 Precautions for safe handling Ensure good ventilation of the work station. 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 dus and/or vapor concentrations. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use non-sparking tools. Take precautionary measures against static discharge. Flammable var may accumulate in the container. Use explosion-proof equipment. Wear personal protecti equipment. Avoid contact with skin and eyes. 		n-proof equipment. Keep away from sources of ignition - No smoking. of electrostatic charge. Provide adequate ventilation to minimize dust trations. Keep away from heat, hot surfaces, sparks, open flames and s. No smoking. Ground/bond container and receiving equipment. Use only take precautionary measures against static discharge. Flammable vapors ne container. Use explosion-proof equipment. Wear personal protective	
		smoking and when le	eaving work. Wash contaminated clothing before reuse. Do not eat, drink or is product. Always wash hands after handling the product.	
7.2.	Conditions for safe s	torage, including any incompatibilitie		
Techn	ical measures	receiving equipment		
Storag	e conditions	: Store refrigerated (-	°C to 5°C). Protect from light.	
7.3.	Specific end use(s)			
No ad	ditional information availab	ble		
SEC	FION 8: Exposure c	ontrols/personal protection		
8.1.	Control parameters			
1,2,4	-BENZENETRICARBOX	LIC ACID, 1,4-BIS(2-ETHYL HEXYL)	STER (UNLABELED) 100 UG/ML IN 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).	

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4) for chemical contaminants. (Title 8, Article 107). Italy - Portugal - USA ACGIH ACGIH TWA (ppm) 50.0000000 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) (ppm)

40 ppm Basis: California permissible exposure limits

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

METHYL TERT-BUTYL ETHE	R UNLABELED (1634-04-4)		
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	ropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Ensure good ventilation of the work station.		
Personal protective equipment	: Gloves. Protective clothing. Protectiv	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.	
Materials for protective clothing	: Wear suitable protective clothing and	d gloves.	
Hand protection	: Wear suitable protective clothing and	d gloves.	
Eye protection	: Wear eye protection. Chemical gogg	les or face shield with safety glasses. Safety glasses.	
Skin and body protection	: Wear suitable protective clothing, glo	oves and eye/face protection.	
Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied a		ar respiratory protection. Approved supplied air respirator	
Environmental exposure controls : Avoid release to the environment.			

9.1. Information on basic physical and chemical properties

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

The properties listed below are for the solvent, the main comp	ponent 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
рН	: 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 mm²/s at 20 °C (68 °F) - 0.409 mm2/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

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

26, 2012 / Rules and Regulations		
SECTION 10: Stability and reactivity		
10.1. Reactivity		
Highly flammable liquid and vapor.		
10.2. Chemical stability		
See storage and expiration date on CoA.		
10.3. Possibility of hazardous reactions		
No dangerous reactions known under normal cond	ditions of use.	
10.4. Conditions to avoid		
Open flame. Sparks. Avoid contact with hot surfac	es. Heat. No flames, no sparks. Eliminate all sources of ignition.	
10.5. Incompatible materials		
Oxidizing agent. Strong acids.		
10.6. Hazardous decomposition products		
Carbon oxides (CO, CO2).		
SECTION 11: Toxicological information	on	
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-B	IS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE	
LD50 oral rat	4000 mg/kg	
LC50 inhalation rat (ppm)	23576 ppm/4h - 4 h	
ATE CLP (oral)	4000.000 mg/kg body weight 23576.000 ppmV/4h	
METHYL TERT-BUTYL ETHER UNLABELED (4000 mg/kg	
LC50 inhalation rat (ppm)	23576 ppm/4h - 4 h	
	IS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
ATE CLP (oral)	500.000 mg/kg body weight	
Skin corrosion/irritation	: Skin - Rabbit Result: Skin irritation	
Serious eye damage/irritation	: Eyes - Rabbit Result: No eye irritation	
Respiratory or skin sensitization	: Will not occur	
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	
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. nausea, vomiting. Dizziness. central nervous system. Aspiration of this material may cause chemical pneumonia.	
IARC group	: 2B	
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.	
Symptoms/injuries after skin contact	: Causes skin irritation.	
Symptoms/injuries after eye contact	: May cause eye irritation.	
Symptoms/injuries after ingestion	: May be harmful if swallowed.	

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN 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	

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

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE		
491 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h		
> 1000 mg/l other fish - 96 h		
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)		
672 mg/l Pimephales promelas (fathead minnow) - 96 h		
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				
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE				
Biodegradation 0 % - Not readily biodegradable. (OECD Test Guideline 301D)				
METHYL TERT-BUTYL ETHER UNLABELED	METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)			
Biodegradation	0 % - Not readily biodegradable. (OECD Test Guideline 301D)			
12.3. Bioaccumulative potential				
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-	BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE			
Log Pow	1.06			
METHYL TERT-BUTYL ETHER UNLABELED	(1634-04-4)			
Log Pow	1.06			
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				
No additional information available				
SECTION 13: Disposal consideration	15			
13.1. Waste treatment methods	· Maste materials should be discovered of under earditizes which must Federal Otate, and I and			
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.			
Ecology - waste materials	: Dispose of as unused product.			
SECTION 14: Transport information				
In accordance with ADR / RID / IMDG / IATA / A	DN			
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			
	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			
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150			

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

DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
Marine pollutant	: No

mergency Response Guide (ERG) Number	: 127
other information	: No supplementary information available.
pecial transport precautions	: Not classified as dangerous in the meaning of transport regulations.
overland transport	
acking group (ADR)	: II
lass (ADR)	: 3 - Flammable liquid
lazard identification number (Kemler No.)	: 33
lassification code (ADR)	: F1
lazard labels (ADR)	: 3 - Flammable liquids
brange plates	33 2398
unnel restriction code (ADR)	: D/E
imited quantities (ADR)	11
AC	: •3YE
xcepted quantities (ADR)	: E2
ransport by sea	
OT 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.
IFAG-No	: 127
ir transport	
OT Quantity Limitations Passenger aircraft/rail 49 CFR 173.27)	: 5L
OT Quantity Limitations Cargo aircraft only (49 FR 175.75)	: 60 L
ivil Aeronautics Law	: Flammable liquids
4.4. Environmental hazards	
other information	: No supplementary information available.
4.5. Special precautions for user	
pecial 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
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE
Subject to reporting requirements of United States SARA Section 313

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

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE SARA Section 302 Threshold Planning Not subject to reporing requirements of the United States SARA Section 302. SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard 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 Not subject to reporting requirements of the United States SARA Section 302. SARA Section 302 Threshold Planning Not subject to reporting requirements of United States SARA Section 313 SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard Delayed (chronic) health hazard Delayed (chronic) health hazard
Quantity (TPQ) Fire hazard SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard 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 Not subject to reporting requirements of the United States SARA Section 302. Quantity (TPQ) Fire hazard SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard Immediate (acute) health hazard
Immediate (acute) health hazard 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) SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard
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
SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporing requirements of the United States SARA Section 302. SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard
Quantity (TPQ) Fire hazard SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard
Immediate (acute) health hazard
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
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 Immediate (acute) health hazard
SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE	
Listed on the Canadian DSL (Domestic Substances List)	
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Listed on the Canadian DSL (Domestic Substances List)	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)

15.3. US State regulations

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) 100 UG/ML IN MTBE()				
U.S California - Proposition	n 65 - Carcinogens List	No		
U.S California - Proposition Toxicity	n 65 - Developmental	No		
U.S California - Proposition Toxicity - Female	n 65 - Reproductive	No		
U.S California - Proposition Toxicity - Male	n 65 - Reproductive	No		
State or local regulations		U.S Massachusetts - Right U.S New Jersey - Right to k U.S Pennsylvania - RTK (R	Know Hazardous Substance Lis	t
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)
No	No	No	No	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)				
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	

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

IETHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
State or local regulations	
J.S Massachusetts - Right To Know List J.S New Jersey - Right to Know Hazardous Substance List J.S Pennsylvania - RTK (Right to Know) List	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
State or local regulations	
J.S Pennsylvania - RTK (Right to Know) List J.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information

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Other information
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: 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:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
R11	Highly flammable
R12	Extremely flammable
R22	Harmful if swallowed
R38	Irritating to skin
F	Highly flammable
F+	Extremely flammable
Xi	Irritant
Xn	Harmful

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.
HMIS III 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