

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: 19/02/2014 CLM-6779-MT-S Revision date: 20/11/2017

Supersedes: 19/02/2014

Version: 2.0

	cation of the substance/mixture and of the company/undertaking
1.1. Product identifi	
Product form	
Product name	: TRICLOSAN (13C12, 99%) 100 UG/ML IN MTBE (2',4,4'-TRICHLORO-2- HYDROXYDIPHENYL ETHER)
Product code	: CLM-6779-MT-S
1.2. Relevant identif	ied uses of the substance or mixture and uses advised against
1.2.1. Relevant identif	ied uses
Main use category	: Professional use
Industrial/Professional use	spec : For professional use only
1.2.2. Uses advised a	gainst
No additional information a	•
1.3. Details of the su	upplier of the safety data sheet
Cambridge Isotope Labora	tories, Inc.
50 Frontage Road Andover, MA 01810	
USA	
USA: 1-800-322-1174 Int	
<u>cilsales@isotope.com</u> w	ww.isotope.com
Emergency tele	phone number
Emergency numbers:	
Chemtrec: 1-800-424-930	
International: 1-703-741-5	
SECTION 2: Hazards	
	f 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; R11 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

central nervous system. kidneys.

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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

$ \begin{array}{llllllllllllllllllllllllllllllllllll$	2.2. Label elements	
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Labelling according to Regulation (EC) N	lo. 1272/2008 [CLP]
signal word (CLP) : Danger tazard statements (CLP) : H225 - Highly flammable liquid and vapour H315 - Causes skin irritation recautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P233 - Keep container and receiving equipment P240 - Groundbond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P241 - Wash with plenty of water P3034P3614P352 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash with plenty of water P3034P3614P353 - IF ON SKIN Vash vash plenty of water P3034P3614P353 - IF ON SKIN Vash vash plenty of water P3034P3614P353 - IF ON SKIN Vash vash plenty of water P3034P3614P353 - IF ON SKIN Vash vash plenty of water P3034P3614P353 - IF ON SKIN Vash vash plenty of water P303-P3614P353 - IF ON SKIN Vash vash plenty of water P20 - GroundBond container and receiving equipment P24 - Use oundBond container and receiving equipment P24 - Use only non-sparting tools P243 - Take precautionary measures against static discharge P243 - Take precautionary measures against static discharge P244 - Vash with plenty of water P3034P3614P353 - If on skin (vash vish plenty of water P3034P3614P353 - If on skin (vash vish plenty) for labelling on this label) P244 - Take off contaminated clothing, Rines sin with water/shower P321 - Specific treatment (see Hazardous component(s) for labelling on this label) P324-P361 - Take off contaminated clothing, Rines sin with water/shower P321 - Specific treatment	Hazard pictograms (CLP)	
tazard statements (CLP) : H225 - Highly flammable liquid and vapour 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 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P244 - Use explosion-proof electrical, lighting, ventilating equipment P246 - Wash hands, foreams and face thoroughy after handling P245 - Wash hands, foreams and face thoroughy after handling P246 - Wash hands, foreams and face thoroughy after handling P304 - P304 + P305 - IF ON SKIN (or hair), Take off immediately all contaminated clothing. Rinee akin with water/shower P304 + P304 + P305 - IF ON SKIN (or hair), Take off immediately all contaminated clothing. Rinee akin with water/shower Azard statements (GHS-US) : Danger : B206 - Wash paway from heat, hot surfaces, open flames, sparks No smoking P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P233 - Keep container ightly closed P240 - GroundBond container and receiving equipment P244 - Sec ony non-sparking tools P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking P243 - Sec ony non-sparking tools P240 - GroundBond container and receiving equipment </th <th></th> <th>GHS02 GHS07</th>		GHS02 GHS07
Precautionary statements (CLP) P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P230 - Ground/bond container and receiving equipment P244 - Use explosion-proof electrical lighting, ventilating equipment P244 - Wash hands, forearms and face thoroughly after handling P230 - F252 - IF ON SKIN: Wash with plenty of water P230 - P252 - IF ON SKIN: Wash with plenty of water P230 + P252 - IF ON SKIN: Wash with plenty of water P230 - P252 - IF ON SKIN: Wash with plenty of water P230 + P252 - IF ON SKIN: Wash with plenty of water P230 - P252 - IF ON SKIN: Wash with plenty of water P230 + P253 - IF ON SKIN: Wash with plenty of water P230 - P252 - IF ON SKIN: Wash with plenty of water P230 + P253 - IF ON SKIN: Wash with plenty of water P230 - P252 - IF ON SKIN: Wash in irritation Consort Signal word (GHS-US) : Danger tazard statements (GHS-US) : H225 - Highly flammable liquid and vapour H31 - Causes skin irritation : P240 - Ground/Bond container and receiving equipment P242 - Scound/Bond container and receiving equipment P241 - Use explosion-proof electrical squipment P242 - Scound/Bond container and receiving equipment P242 - Iso skin: irritation P242 - Use only non-sparking tools : P240 - Ground/Bond container and receiving equipment	Signal word (CLP)	: Danger
 smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proteilectrical, lighting, venillating equipment P244 - Wash hands, forearms and face thoroughly date handling P280 - Waze rytotechic eclothing, protective gloves P303 - F84 - Wash hands, forearms and face thoroughly date handling P280 - Wazer protective coldning, protective gloves P303 - F84 - Wash hands, forearms and face thoroughly date handling P280 - Wazer protective coldning, protective gloves P303 - F83 - IF ON SKIN (Vash with plenty of water P303 - P36 - IF ON SKIN (Vash with plenty of water P303 - P36 - IF ON SKIN (Vash with plenty of water P303 - P36 - IF ON SKIN (Vash with plenty of water P303 - Research with water/shower 	Hazard statements (CLP)	
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Signal word (GHS-US) : Danger isignal word (GHS-US) : H225 - Highly flammable liquid and vapour 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 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, for protective clothing, protective gloves P302+P352 - If on skin: Wash with plenty of water P303+P352 - If on skin: Wash with plenty of water P303+P352 - I fon skin: Wash with plenty of water P303+P352 - I fon skin: Wash with blefor labelling on this label) P32+P313 - I specific treatment (see Hazardous component(s) for labelling on this label) P32+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 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation	GHS-US labelling	
Signal word (GHS-US): Dangertazard statements (GHS-US): H225 - Highly flammable liquid and vapour H315 - Causes skin irritationPrecautionary 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 P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P266 - 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/showerP321 - Specific treatment (see Hazardous component(s) for labelling on this label) P362+P313 - If ake 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 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation	Hazard pictograms (GHS-US)	
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 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 P303+P352 - If on skin: Wash with plenty of water P303+P351 + P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P321 - Specific treatment (see Hazardous component(s) for labelling on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off irre: Use Water spray, Alcohol resistant foam, Dry chemical, Carbon dioxide. to extinguish P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation 	Hazard statements (GHS-US)	: H225 - Highly flammable liquid and vapour
	Precautionary statements (GHS-US)	 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 P321 - Specific treatment (see Hazardous component(s) for labelling 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 P501 - Dispose of contents/container to hazardous or special waste collection point, in
	2.3. Other hazards	

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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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	99.987	F; R11 Xi; R38
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLORO-2- HYDROXYDIPHENYL ETHER)	(CAS No) 3380-34-5 (EC No) 222-182-2 (EC Index No) 604-070-00-9	0.013	Xi; R36/38
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
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLORO-2- HYDROXYDIPHENYL ETHER)	(CAS No) 3380-34-5 (EC No) 222-182-2 (EC Index No) 604-070-00-9	0.013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	%	GHS-US classification
METHYL TERT-BUTYL ETHER UNLABELED	(CAS No) 1634-04-4	99.987	Flam. Liq. 2, H225 Skin Irrit. 2, H315
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLORO-2- HYDROXYDIPHENYL ETHER)	(CAS No) 3380-34-5	0.013	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H-statements: 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 e	ffects, 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 medical attention and special treatment needed		
No additional information available		
SECTION 5: Fire-fighting measure	es	
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.	

: Use water spray to cool exposed surfaces.

Other information

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SECTION 6: Accidental release measures			
6.1.	Personal precautions, protective equipment and emergency procedures		
6.1.1.	For non-emergency personnel		
Emergen	icy procedures	: Use personal protective equipment as required. Avoid breathing vapours, mist, gas. Provide adequate ventilation to minimize dust and/or vapour concentrations. Avoid dust formation. Evacuate area. Remove all sources of ignition. Special attention should be given to low areas/pits where flammable vapours can accumulate.	
6.1.2.	For emergency responders		
Protectiv	e 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 containmer	at and cleaning up	
For conta	ainment	: 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 inf	ormation	: Dispose of materials or solid residues at an authorized site.	
6.4.	Reference to other sections		
For furth	er information refer to section 13.		
SECTI	ON 7: Handling and storage		
7.1.	Precautions for safe handling		
Precautio	ons for safe handling	: Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray, vapours. 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 vapour 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.	7.2. Conditions for safe storage, including any incompatibilities		
Technica	I 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 additi	onal information available		
SECTI	ON 8: Exposure controls/perso	nal protection	

8.1. **Control parameters** TRICLOSAN (13C12, 99%) 100 UG/ML IN MTBE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER) 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) (mg/m³) 144 mg/m³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107). USA OSHA 40 ppm Basis: California permissible exposure limits OSHA PEL (Ceiling) (ppm) for chemical contaminants. (Title 8, Article 107). **METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)** 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) (mg/m³) 144 mg/m³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107). 40 ppm Basis: California permissible exposure limits USA OSHA OSHA PEL (Ceiling) (ppm) 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.

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Personal	protective	equipment	
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: 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 Information on basic physical and chemical properties 9.1. 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 Colour : Colourless. Odour : No data available. Odour threshold : No data available : No data available pН Relative evaporation rate (butylacetate=1) : No data available : -108.6 °C (-163.5 °F) Melting point 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 Vapour pressure : 1018.7 hPa (764.1 mmHg) at 55°C (131°F), 279.2 hPa (209.4 mmHg) at 20 °C (68°F) Relative vapour density at 20 °C : No data available : No data available Relative density : 0.74 g/ml at 25 °C (77 °F) Density Solubility : Water: 42 g/l at 20 °C (68 °F) - OECD Test Guideline 105 Log Pow : 1.06 Log Kow : No data available : 0.464 mm²/s at 20 °C (68 °F) - 0.409 mm2/s at 40 °C (104 °F) Viscosity, kinematic Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available : 1.6 - 15.1 % (V) Explosive limits **Other information** 9.2.

No additional information available

SECTI	ON 10: Stability and reactivity			
10.1.	Reactivity			
No addit	No additional information available			
10.2.	Chemical stability			
See stor	See storage and expiration date on CoA.			
10.3.	Possibility of hazardous reactions			
No addit	ional information available			
10.4.	Conditions to avoid			
Heat. Op	Heat. Open flame. Sparks.			

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10.5. Incompatible materials			
Oxidizing agent. Strong acids.			
10.6. Hazardous decomposition products	\$		
Carbon oxides (CO, CO2).			
SECTION 11: Toxicological informat	ion		
11.1. Information on toxicological effects			
Acute toxicity	: Not classified		
TRICLOSAN (13C12, 99%) 100 UG/ML IN M	TBE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)		
LD50 oral rat	4000 mg/kg		
LC50 inhalation rat (ppm)	23576 ppm/4h		
	RO-2-HYDROXYDIPHENYL ETHER) (3380-34-5)		
LD50 oral rat	3700 mg/kg		
ATE CLP (oral)	3700.000 mg/kg bodyweight		
METHYL TERT-BUTYL ETHER UNLABELED			
LD50 oral rat	4000 mg/kg		
LC50 inhalation rat (ppm)	23576 ppm/4h		
Skin corrosion/irritation	: Causes skin irritation. Skin rabbit		
Serious eye damage/irritation	Causes skin irritation : Not classified		
	Eyes rabbit No eye irritation		
Respiratory or skin sensitisation	: Will not occur		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
STOT-single exposure	: Not classified		
STOT-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/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		
TRICLOSAN (13C12, 99%) 100 UG/ML IN MTBE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)		
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	
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER) (3380-34-5)		
LC50 fish 1	0.288 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h	
EC50 Daphnia 1	0.39 mg/l Daphnia magna (Water flea) - 48 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		

OFOTION

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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

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)			
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			
	BE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)		
Persistence and degradability	Not readily biodegradable. (OECD 301D method).		
Biodegradation	0 %		
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLOR	O-2-HYDROXYDIPHENYL ETHER) (3380-34-5)		
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			
TRICLOSAN (13C12, 99%) 100 UG/ML IN MTE	BE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)		
Log Pow	1.06		
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLOR	O-2-HYDROXYDIPHENYL ETHER) (3380-34-5)		
Log Pow	4.7		
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 assessmen	t		
No additional information available			
12.6. Other adverse effects			
No additional information available			
SECTION 13: Disposal considerations	5		
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.		
Ecology - waste materials	: Dispose of as unused product.		
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG / IATA / AD	Ν		
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		
	PLANMABLE LIQUID		
Packing group (DOT)	: II - Medium Danger		

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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
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Packaging Bulk (49 CPR 173.xxx)	: 242 : 1000 lbs
Marine pollutant	: No
	. 10
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.
opecial transport precautions	. Not classified as dangerous in the meaning of transport regulations.
Overland transport	
Packing group (ADR)	: 11
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 33
Classification code (ADR)	: 55 : F1
Danger labels (ADR)	: 3 - Flammable liquids
Orange plates	2 2 3 3 3 3
	2398
Tunnel restriction code (ADR)	: D/E
Limited quantities (ADR)	11
EAC code	: •3YE
Excepted quantities (ADR)	: E2
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 (49 CFR 173.27)	
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
Civil Aeronautics Law	: Flammable liquids
14.4. Environmental hazards	

Other information

: No supplementary information available.

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Special precautions for user 14.5.

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	
TRICLOSAN (13C12, 99%) 100 UG/ML IN MT	BE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)
Subject to reporting requirements of United Stat	tes SARA Section 313
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 Delayed (chronic) health hazard
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLOF	RO-2-HYDROXYDIPHENYL ETHER) (3380-34-5)
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, 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
METHYL TERT-BUTYL ETHER UNLABELED	(1634-04-4)
Subject to reporting requirements of United Stat	tes SARA Section 313
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 Delayed (chronic) health hazard

15.2. International regulations

CANADA

TRICLOSAN (13C12, 99%) 100 UG/ML IN MTBE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)	
Listed on the Canadian DSL (Domestic Substances List)	
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
METHTE TERT-BOTTE ETHER ONEABELED (1034-04-4)	

National regulations 15.2.1.

No additional information available

15.3. US State regulations

TRICLOSAN (13C12, 99%) 100 UG/ML IN MTBE (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER)()				
U.S California - Propositior	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 - Rig U.S New Jersey - Right t U.S Pennsylvania - RTK	o Know Hazardous Substance List	
TRICLOSAN (13C12, 99%)	(2',4,4'-TRICHLORO-2-HY	DROXYDIPHENYL ETHER)	(3380-34-5)	
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	

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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	
TRICLOSAN (13C12, 99%) (2',4,4'-TRICHLORO-2-HYDROXYDIPHENYL ETHER) (3380-34-5)				
State or local regulations				
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) 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-statements:

'	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R36/38	Irritating to eyes and skin
R38	Irritating to skin
F	Highly flammable
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.
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