

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

Version: 1.2

Date of issue: 12/09/2017 Revision date: 23/07/2018 Supersedes: 04/05/2018

DLM-9563-C

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

Product identifier

Product form : Mixtures

Product name : TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML

IN METHANOL

: DLM-9563-C Product code

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

Uses advised against

No additional information available

Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road

Andover, MA 01810

USA: 1-800-322-1174 Int: 1-978-749-8000 www.isotope.com cilsales@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

Classification of the substance or mixture

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

Flam. Liq. 2 H225 Acute Tox. 3 (Oral) H301 Acute Tox. 3 (Dermal) H311 Acute Tox. 3 (Inhalation) H331 Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 1 H370

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

T; R39/23/24/25 Xi: R36/38

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225 Acute Tox. 3 (Oral) H301 Acute Tox. 3 (Dermal) H311 Acute Tox. 3 (Inhalation) H331 Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 1 H370

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

Eyes, Kidney, Liver, Heart, Central nervous system. Highly flammable liquid and vapour. Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (if inhaled, if swallowed, in contact with skin). Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed. Causes skin irritation. Causes serious eye irritation.

22 Label elements

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

Hazard pictograms (CLP)







GHS08

GHS06

Signal word (CLP) : Danger

Hazard statements (CLP) H225 - Highly flammable liquid and vapour

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation

H370 - Causes damage to organs (eyes, heart, kidneys, liver, central nervous system) (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

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment P260 - Do not breathe dust, mist, vapors, fume, gas, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

GHS-US labeling

Hazard pictograms (GHS-US)







: Danger

Signal word (GHS-US)

Hazard statements (GHS-US) H225 - Highly flammable liquid and vapour

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H370 - Causes damage to organs (central nervous system, eyes, heart, kidneys, liver) (Dermal,

Inhalation, oral)

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, lighting, ventilating equipment

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P260 - Do not breathe dust, fume, gas, mist, spray, vapors. P261 - Avoid breathing dust, fume, gas, mist, spray, vapors. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective clothing, protective gloves.

P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER

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

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P307+P311 - If exposed: Call a poison center/doctor

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P311 - Call a doctor, a POISON CENTER

P312 - Call a doctor, a POISON CENTER if you feel unwell

P321 - Specific treatment (see Hazardous component(s) for labeling on this label)

P322 - Specific treatment (see Hazard pictograms (CLP) on this label)

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

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

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry

extinguishing powder to extinguish.

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

PBT: not relevant - no registration required

SECTION 3: Composition/Information on ingredients

3.1. **Substances**

Not applicable

Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.987359	F; R11 T; R39/23/24/25 Xi; R36/38
TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%)	(CAS-No.) 6009-98-9 (Unlabeled)	0.013	Not classified

(2,2,6,1,1,6,6,1,6,2,6,6,7,0)	I .	l	
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.987359	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370
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Name	Product identifier	%	GHS-US classification
100% METHANOL UNLABELED	(CAS-No.) 67-56-1	99.987359	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370
TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%)	(CAS-No.) 6009-98-9 (Unlabeled)	0.013	Not classified

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

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand. Call a physician immediately. Evacuate danger area.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact Rinse skin with water/shower. Take immediately victim to hospital. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with First-aid measures after eye contact water for several minutes.

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Call a physiciar

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Call a physician immediately.

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

Symptoms/effects

: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system) (in contact with

skin, if inhaled, if swallowed).

Symptoms/effects after inhalation

First-aid measures after ingestion

Toxic if inhaled.

Symptoms/effects after skin contact

Toxic in contact with skin. Repeated exposure to this material can result in absorption through

skin causing significant health hazard. Causes skin irritation.

Symptoms/effects after eye contact

Causes serious eye irritation.

Symptoms/effects after ingestion

: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Dry sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : Vapors may form flammable mixture with air. Highly flammable liquid and vapour.

5.3. Advice for firefighters

Firefighting instructions

: Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Wear recommended personal protective equipment.

Other information : Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures

: Wear respiratory protection. Do not breathe dust, mist, gas, spray, vapors, fume. Avoid contact with skin, eyes and clothing. Ventilate spillage area. Remove all sources of ignition. No open flames, no sparks, and no smoking. Ensure adequate air ventilation. 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

Do not allow to enter drains or water courses. Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment

: Dike and contain spill.

Methods for cleaning up

: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. This material 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 sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

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Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust, fume, gas, spray, vapors, mist. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.

Hygiene measures

: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Lighting equipment, ventilating

Storage conditions : Store in freezer (-20 C). Protect from light.

Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL			
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	260 mg/m³ Basis: NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m³ Basis: NIOSH Recommended Exposure Limits	
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits	
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.	
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
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USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
USA OSHA	Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.	
100% METHANOL UNLABEL	.ED (67-56-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	

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100% METHANOL UNLABEL	.ED (67-56-1)	
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Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.
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USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m³ Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
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USA OSHA	OSHA PEL (STEL) (mg/m³)	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.

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. Wear suitable protective

clothing.

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

Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

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 : 32.04 g/mol

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Color : Colorless
Odor : Pungent

Odor threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : -98 °C (-144 °F) Freezing point : No data available Boiling point : 64.7 °C (148.5 °F)

Flash point : 9.7 °C (49.5 °F) - closed cup

Auto-ignition temperature : 455 °C (851 °F) at 1,013 hPa (760 mmHg)

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapour

Vapor pressure : 130.3 hPa (97.7 mmHg) at 20 °C (68 °F); 169.27 hPa (126.96 mmHg) at 25 °C (77 °F)

Vapor pressure at 50 °C : 546.6 hPa (410 mmHg) at 50 °C (122 °F)

Relative vapor density at 20 °C : 1.11

Relative density : No data available

Specific gravity / density : 0.791 g/ml at 25 °C (77 °F)
Solubility : Water: Completely miscible

Log Pow : -0.77

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : Product is not explosive.

Oxidizing properties : Non oxidizing material according to EC criteria.

Explosion limits : 6 - 36 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form flammable mixture with air. Highly flammable liquid and vapour.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. Open flame. Direct sunlight. Sparks.

10.5. Incompatible materials

Acid anhydrides. Acid chlorides. Oxidizing agent. Alkali Metal Amides. Reducing agents. Acids.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
LD50 oral rat	1187 - 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE CLP (oral)	100.000 mg/kg body weight	
ATE CLP (dermal)	17.100 mg/kg body weight	
ATE CLP (gases)	700.000 ppmV/4h	
ATE CLP (vapors)	3.000 mg/l/4h	
ATE CLP (dust, mist)	0.500 mg/l/4h	

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	M SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL			
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.			
100% METHANOL UNLABELED (67-56-1)				
LD50 oral rat	1187 - 2769 mg/kg			
LD50 dermal rabbit	17100 mg/kg			
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h			
ATE CLP (oral)	100.000 mg/kg body weight			
ATE CLP (dermal)	300.000 mg/kg body weight			
ATE CLP (vapors)	3.000 mg/l/4h			
ATE CLP (dust, mist)	128.200 mg/l/4h			
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.			
Skin corrosion/irritation	: Skin - Rabbit. Result: No skin irritation			
Serious eye damage/irritation	: Eyes - Rabbit. Result: No eye irritation			
Respiratory or skin sensitization	: Maximisation Test . Guinea pig. Did not cause sensitization. (OECD 406 method)			
Germ cell mutagenicity	: AMES test: S. tymphimurium. Result: negative. fibroblast. Result: Negative. Mutation in mammalian somatic cells. Mutagenicity (in vivo mammalian bone-marrow cystogenetic test, chromosomal analysis) - Mouse - male and female Result: negative. Mouse - male and female. Result: Negative			
Carcinogenicity	: Not classified			
Reproductive toxicity	: Damage to fetus not classifiable. Fertility classification not possible from current data.			
Specific target organ toxicity – single exposure	: Causes damage to organs through prolonged or repeated exposure Causes damage to organs			
Specific target organ toxicity – repeated exposure	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure No data available			
Aspiration hazard	: No aspiration toxicity classification.			
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. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach. Toxic if swallowed. Toxic in contact with skin.			
Symptoms/effects after inhalation	: Toxic if inhaled.			
Symptoms/effects after skin contact	: Toxic in contact with skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes skin irritation.			
Symptoms/effects after eye contact	: Causes serious eye irritation.			
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.			

SECTION 12: Ecological information

1	2.1		Т	O)	Χİ	Ci	ity	1

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
LC50 fish 1	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	
100% METHANOL UNLABELED (67-56-1)		
LC50 fish 1	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	

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12.2. Persistence and degradability

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
Biochemical oxygen demand (BOD)	600 - 1200 mg/g	
Chemical oxygen demand (COD)	1420 mg/g	
ThOD	1500 mg/g	
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d	

100% METHANOL UNLABELED (67-56-1)		
Biochemical oxygen demand (BOD)	600 - 1200 mg/g	
Chemical oxygen demand (COD)	1420 mg/g	
ThOD	1500 mg/g	
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d	

12.3. Bioaccumulative potential

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C	
Bioconcentration factor (BCF REACH)	1	
Log Pow	-0.77	

100% METHANOL UNLABELED (67-56-1)	
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.77

12.4. Mobility in soil

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
Ecology - soil	Not degradable in the soil.	
100% METHANOL UNLABELED (67-56-1)		
Ecology - soil	Not degradable in the soil.	

12.5. Results of PBT and vPvB assessment

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL

PBT: not relevant - no registration required

100% METHANOL UNLABELED (67-56-1)

PBT: not relevant - no registration required

12.6. Other adverse effects

Other adverse effects : Avoid release to the environment.

Other information : Stability in water: at 19 °C - (83 - 91%) - 72 h. Remarks: Hydrolyses on contact with water.

Hydrolyses readily.

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.

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) : 1230 DOT NA no. UN1230

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

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: 3 - Flammable liquid Hazard labels (DOT)

6.1 - Poison



+ - Fixes (cannot be altered) proper shipping name, hazard class, and packing group,I - Proper **DOT Symbols**

shipping name appropriate for international and domestic transportation

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)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

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

Additional information

Emergency Response Guide (ERG) Number : 131

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : 11

: 3 - Flammable liquid Class (ADR)

Hazard identification number (Kemler No.) : 336 Classification code (ADR) : FT1

Hazard labels (ADR) 3 - Flammable liquids

6.1 - Toxic substances



Orange plates

336 123ն

Tunnel restriction code (ADR) : D/E Limited quantities (ADR) 11 Excepted quantities (ADR) : E2

Transport by sea

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a **DOT Vessel Stowage Location**

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; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

MFAG-No : 131

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Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 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

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

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313			
CERCLA RQ	5000 lb		
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		

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) (6009-98-9 (Unlabeled))		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	

100% METHANOL UNLABELED (67-56-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CERCLA RQ	5000 lb	
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	

15.2. International regulations

CANADA

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL

Listed on the Canadian DSL (Domestic Substances List)

100% METHANOL UNLABELED (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	Yes	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	

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TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) 100 UG/ML IN METHANOL		
State or local regulations	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities	
	U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations	
	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	
	U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances	

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) (6009-98-9 (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	

140	140	140	140	
100% METHANOL UNLABELED (67-56-1)				
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	Yes	No	No	

TAUROCHENODEOXYCHOLIC ACID, SODIUM SALT (2,2,3,4,4,6,6,7,8-D9, 98%) (6009-98-9 (Unlabeled))

State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

100% METHANOL UNLABELED (67-56-1)

State or local regulations

- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- 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
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances

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:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
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
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H370	Causes damage to organs
R11	Highly flammable
R36/38	Irritating to eyes and skin
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
F	Highly flammable
Т	Toxic
Xi	Irritant

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NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

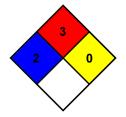
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient

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

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