

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: 1.1

Date of issue: 10/02/2016 Revision date: 31/08/2018 Supersedes: 10/02/2016

CLM-9847-S

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

1.1. Product identifier

Product form : Mixtures

Product name : ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/ML IN

METHANOL

Product code : CLM-9847-S

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 <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
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

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:vapour) H331
Skin Irrit. 2 H315
Eye Irrit. 2A 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)







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 (eyes, kidneys, liver, heart, central nervous system) (Dermal,

Inhalation, oral)

Precautionary statements (GHS-US)

P210 - Keep away from heat, 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, mist, gas, spray, vapors. P261 - Avoid breathing dust, fume, gas, spray, vapors, mist. 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	99.873737	F; R11 T; R39/23/24/25 Xi; R36/38
ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%)	(CAS-No.) 4247-02-3 (Unlabeled) (EC-No.) 224-208-8 (Unlabeled)	0.13	N; R51/53
Name	Product identifier	%	Classification according to Regulation (EC) No.

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	99.873737	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
ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%)	(CAS-No.) 4247-02-3 (Unlabeled) (EC-No.) 224-208-8 (Unlabeled)	0.13	Aquatic Chronic 2, H411

Name	Product identifier	%	GHS-US classification
100% METHANOL UNLABELED	(CAS-No.) 67-56-1	99.873737	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

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 person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Call a doctor.

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.

First-aid measures after eye contact

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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First-aid measures after ingestion : 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 after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowed.

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.

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

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

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

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

legislation.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection				
8.1. Control parameters				
ISOBUTYL PARABEN (ISOB	ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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)		
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.		
100% METHANOL UNLABEL	ED (67-56-1)			
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.		

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100% METHANOL UNLABELED (67-56-1)			
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)	
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.	

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/ML IN METHANOL		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	40 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	260 mg/m³	
Acute - local effects, dermal	260 mg/cm ²	
Long-term - systemic effects, dermal	40 mg/kg bodyweight/day	
Long-term - local effects, dermal	260 mg/cm ²	
Long-term - local effects, inhalation	260 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	8 mg/kg body weight	
Acute - systemic effects, inhalation	50 mg/m³	
Acute - systemic effects, oral	8 mg/kg body weight	
Acute - local effects, inhalation	50 mg/m³	
Long-term - systemic effects,oral	8 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	50 mg/m³	
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day	
Long-term - local effects, inhalation	50 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	154 mg/l	
PNEC aqua (marine water)	15.4 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	570.4 mg/kg dwt	
PNEC (Soil)		
PNEC soil	23.5 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	100 mg/kg	

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.

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

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Physical state

Appearance

Molecular mass

Color

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) : No data available

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. No flames, no sparks. Eliminate all sources of ignition.

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:vapour: Toxic if inhaled.

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ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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)	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.	
ISOBUTYL PARABEN (ISOBUTYL 4-HYDROX	(YBENZOATE) (RING-13C6, 99%) (4247-02-3 (Unlabeled))	
LD50 oral rat	2600 mg/kg	
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	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.	
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.	
Symptoms/effects after inhalation	: Toxic if inhaled.	
Symptoms/effects after skin contact	: Toxic in contact with skin. Causes skin irritation.	
Symptoms/effects after eye contact	: Causes serious eye irritation.	
Symptoms/effects after ingestion	: Toxic if swallowed.	
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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.

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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	

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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

12.2. Persistence and degradability

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) (4247-02-3 (Unlabeled))

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

SOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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

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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

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol

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

Hazard labels (DOT) : 3 - Flammable liquid

6.1 - Poison





DOT Symbols

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

14.3. Additional information

Emergency Response Guide (ERG) Number : 131

Other information : No supplementary information available.

Overland transport

Hazard identification number (Kemler No.) : 336

Orange plates

336 1230

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

Transport by sea

DOT Vessel Stowage Location : B - (i) 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; 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

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

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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

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

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/ML IN METHANOL				
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			

100% METHANOL UNLABELED (67-56-1)		
isted 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

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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)

U.S. - California -

Proposition 65 -

15.2.1. National regulations

No additional information available

15.3. US State regulations

U.S. - California -

Proposition 65 -

ISOBUTYL PARABEN (ISOBUTYL 4-HYDROXYBENZOATE) (RING-13C6, 99%) 1 MG/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			
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			
100% METHANOL UNLABELED (67-56-1)				

Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	,
No	Yes	No	No	

U.S. - California -

Proposition 65 -

U.S. - California -

Proposition 65 -

No significant risk level

(NSRL)

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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

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 toxicity (dermal) Category 3		
Acute toxicity (inhalation:vapour) Category 3		
Acute toxicity (oral) Category 3		
Hazardous to the aquatic environment - Chronic Hazard Category 2		
Serious eye damage/eye irritation Category 2		
Flammable liquids Category 2		
Skin corrosion/irritation Category 2		
Specific target organ toxicity (single exposure) Category 1		
Highly flammable liquid and vapour		
Toxic if swallowed		
Toxic in contact with skin		
Causes skin irritation		
Causes serious eye irritation		
Toxic if inhaled		
Causes damage to organs		
Toxic to aquatic life with long lasting effects		
Highly flammable		
Irritating to eyes and skin		
Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed		
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment		
Highly flammable		
Dangerous for the environment		
Toxic		
Irritant		

NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

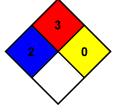
NFPA fire hazard

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

temperature conditions.

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard Physical : 0 Minimal Hazard

CIL Mixture SDS

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

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