

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 4/23/2014 Revision date: 3/20/2024 Supersedes: 7/24/2018 Version: 2.0

## **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : Bisphenol S (13C<sub>12</sub>, 98%) 100 μg/mL in methanol

Product code : CLM-9319-S

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Cambridge Isotope Laboratories, Inc.

50 Frontage Rd

01810

ANDOVER, MA, 01810

USA

T 1-800-322-1174

cilsales@isotope.com - www.isotope.com

#### 1.4. Emergency telephone number

Emergency number : 1-703-741-5970

Chemtrec 1-800-424-9300 24 hours

## **SECTION 2: Hazard(s) identification**

### 2.1. Classification of the substance or mixture

#### **GHS US classification**

H225 Flammable liquids Category 2 Highly flammable liquid and vapor Acute toxicity (oral) Category 3 H301 Toxic if swallowed Acute toxicity (dermal) Category 3 H311 Toxic in contact with skin Acute toxicity (inhalation:vapor) Category 3 H331 Toxic if inhaled Skin corrosion/irritation Category 2 H315 Causes skin irritation Serious eye damage/eye irritation Category 2A H319 Causes serious eye irritation Specific target organ toxicity (single exposure) Category 1 H370 Causes damage to organs (eyes, kidneys, liver, heart, central

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Danger





Signal word (GHS US)

Hazard statements (GHS US)

: H225 - Highly flammable liquid and vapor

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,

nervous system) (Dermal, Inhalation, oral)

Inhalation, oral)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statements (GHS US)

 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, open flames, sparks

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 Both hands 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 poison center or doctor.

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.

P311 - Call a poison center or doctor.

P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see Suitable first-aid treatment should be immediately available. 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 - Take off immediately all contaminated clothing.

P362 - Take off contaminated clothing and wash before reuse.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use Dry chemical, Alcohol resistant foam, Carbon dioxide. 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 Dispose in a safe manner in accordance with local/national regulations.

#### 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
100% METHANOL UNLABELED	CAS-No.: 67-56-1	99.987	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
BISPHENOL S (13C12, 98%)	CAS-No.: 80-09-1 (Unlabeled)	0.013	Eye Irrit. 2A, H319 STOT SE 3, H335

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

## **SECTION 4: First-aid measures**

## 4.1. 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.

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 (acute and delayed)

Potential Adverse human health effects and symptoms : This information the purposes of

: 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.

: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system, Skin) (in contact with skin, if inhaled, if swallowed).

: Toxic if inhaled.

: Toxic in contact with skin. Causes skin irritation.

: Causes serious eye irritation.

: Toxic if swallowed.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

Symptoms/effects

Symptoms/effects after inhalation

Symptoms/effects after skin contact

Symptoms/effects after eye contact

Symptoms/effects after ingestion

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Dry sand.

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

3/20/2024 (Revision date) US - en 3/15

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

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 : For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent

safe disposal. Dike and contain spill. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

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.

legisiation.

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

Hygiene measures

Additional hazards when processed : Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof

equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Handle empty containers with care because residual vapors are

flammable.

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.

 Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash Both hands thoroughly after handling.

## 7.2. Conditions for safe storage, including any incompatibilities

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

3/20/2024 (Revision date) US - en 4/15

# Bisphenol S ( $^{13}C_{12}$ , 98%) 100 µg/mL in methanol

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible materials : Heat sources.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methan	ool	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
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.	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)	
Remark	End of shift (As soon as possible after exposure ceases)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [2]	200 ppm Skin notation.	
OSHA PEL STEL [2]	250 ppm Skin notation.	
BISPHENOL S (13C12, 98%) (80-09-1 (Unlabeled))		
USA - ACGIH - Occupational Exposure Limits		
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
100% METHANOL UNLABELED (67-56-1)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
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.	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)	
Remark	End of shift (As soon as possible after exposure ceases)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	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)	
OSHA PEL TWA [2]	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)	

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

100% METHANOL UNLABELED (67-56-1)		
OSHA PEL STEL [1]	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)	
OSHA PEL STEL [2]	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)	
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits	
Remark (NIOSH)	Potential for dermal absorption.	

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.

#### Materials for protective clothing:

Wear suitable protective clothing and gloves

#### Hand protection:

Wear suitable protective clothing and gloves

## Eye protection:

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

## Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection

## Respiratory protection:

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

## Personal protective equipment symbol(s):









3/20/2024 (Revision date) US - en 6/15

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Liquid.Color: ColorlessOdor: Pungent

Odor threshold : No data available pH : 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

Relative evaporation rate (butyl acetate=1) : 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

Density : 0.791 g/ml at 25 °C (77 °F)

Molecular mass : 32.04 g/mol Solubility : No data available

Partition coefficient n-octanol/water (Log Pow) : -0.77

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

Explosive properties : Product is not explosive.

Oxidizing properties : Non oxidizing material according to EC criteria.

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Vapors may form explosive mixture with air.

## 10.2. Chemical stability

See storage and expiration date on CoA.

## 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Avoid Heat, Flames and Sparks. Open flame. Direct sunlight.

## 10.5. Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals. Reducing agents, Acids.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides. May release flammable gases.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 11: Toxicological information**

11.1. Info	ormation	on toxico	logical	effects
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Acute toxicity (oral) : Toxic if swallowed.

Acute toxicity (dermal) : Toxic in contact with skin.

Acute toxicity (inhalation) : Toxic if inhaled.

Acute toxicity (innaiation)	Toxic ii irinalea.	
Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methanol		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	
ATE US (vapors)	3 mg/l/4h	
Additional data	LDLO, oral, human: 143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
BISPHENOL S (13C12, 98%) (80-09-1 (Unlabel	ed))	
LD50 oral rat	4556 mg/kg	
LD50 dermal rabbit	> 10250 mg/kg	
ATE US (oral)	4556 mg/kg body weight	
100% METHANOL UNLABELED (67-56-1)		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	
ATE US (vapors)	3 mg/l/4h	
ATE US (dust, mist)	128.2 mg/l/4h	
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
	Causes skin irritation.	
Serious eve damage/irritation :	Causes serious ave irritation	

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

National Toxicology Program (NTP) Status

No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.

## **100% METHANOL UNLABELED (67-56-1)**

National Toxicology Program (NTP) Status

No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.

Reproductive toxicity : Not classified

3/20/2024 (Revision date) US - en 8/15

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT-single exposure : Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal,

	Inhalation, oral).	
BISPHENOL S (13C12, 98%) (80-09-1 (Unlabeled))		
STOT-single exposure	May cause respiratory irritation.	
100% METHANOL UNLABELED (67-56-1)		
STOT-single exposure	Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Potential Adverse human health effects and	: This information is based on our current knowledge and is intended to describe the product for	
symptoms	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	: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system, Skin) (in contact with skin, if inhaled, if swallowed).	
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.	

## **SECTION 12: Ecological information**

Symptoms/effects after ingestion

## 12.1. Toxicity

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

: Toxic if swallowed.

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methanol		
LC50 - Fish [1]	19000 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h	
EC50 - Crustacea [1]	24500 mg/l Daphnia magna (Water flea) - 48 h	
100% METHANOL UNLABELED (67-56-1)		
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 - Crustacea [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

Bisphenol S ( <sup>13</sup> C <sub>12</sub> , 98%) 100 μg/mL in methanol		
Persistence and degradability	Not available.	
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	

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 12.3. Bioaccumulative potential

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methanol		
Partition coefficient n-octanol/water (Log Pow)	-0.77	
Bioaccumulative potential	Not available.	
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	
Partition coefficient n-octanol/water (Log Pow)	-0.77	

## 12.4. Mobility in soil

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methanol		
Ecology - soil	Not available.	
100% METHANOL UNLABELED (67-56-1)		
Ecology - soil	Not degradable in the soil.	

#### 12.5. Other adverse effects

Other adverse effects : Avoid release to the environment. Disposal must be done according to official regulations.

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal 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 DOT / TDG / IMDG / IATA

#### 14.1. UN number

DOT NA No : UN1230 UN-No. (TDG) : UN1230 UN-No. (IMDG) : 1230 UN-No. (IATA) : 1230

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol
Proper Shipping Name (TDG) : METHANOL
Proper Shipping Name (IMDG) : METHANOL
Proper Shipping Name (IATA) : Methanol

#### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 3 (6.1)

3/20/2024 (Revision date) US - en 10/15

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 3, 6.1



#### **TDG**

Transport hazard class(es) (TDG) : 3 (6.1) Hazard labels (TDG) : 3, 6.1



#### **IMDG**

Transport hazard class(es) (IMDG) : 3 (6.1) Hazard labels (IMDG) : 3, 6.1



#### IATA

Transport hazard class(es) (IATA) : 3 (6.1) Hazard labels (IATA) : 3, 6.1



## 14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

### 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

#### DOT

UN-No.(DOT) : UN1230

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.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 Quantity Limitations Passenger aircraft/rail (49 : 1 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

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"

TDG

UN-No. (TDG) : UN1230

TDG Special Provisions : 43 - Despite section 2.1 of Part 2 (Classification), these dangerous goods are assigned to this

classification based on human experience.

Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 1 L

Carrying Railway Vehicle Index

Emergency Response Guide (ERG) Number : 131

**IMDG** 

Special provision (IMDG) : 279
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Flash point (IMDG) : 12°C c.c.

Properties and observations (IMDG) : Colourless, volatile liquid. Flashpoint: 12°C c.c. Explosive limits: 6% to 36.5% Miscible with

water. Toxic if swallowed; may cause blindness. Avoid skin contact.

MFAG-No : 131

**IATA** 

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 11 PCA packing instructions (IATA) : 352 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) 60L Special provision (IATA) A113 ERG code (IATA) 3L

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

Not applicable

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/mL in methanol		
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	

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
BISPHENOL S (13C12, 98%)	80-09-1 (Unlabeled)	Not present	-	
100% METHANOL UNLABELED	67-56-1	Present	Active	

BISPHENOL S (13C12, 98%) (80-09-1 (Unlabeled))		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	

100% METHANOL UNLABELED (67-56-1)		
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	

## 15.2. International regulations

#### **CANADA**

## Bisphenol S (13C<sub>12</sub>, 98%) 100 μg/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)

## **EU-Regulations**

No additional information available

## **National regulations**

No additional information available

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 15.3. US State regulations

Bisphenol S (¹³C <sub>12</sub> , 98%) 100 μg/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 Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

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)	Maximum allowable dose level (MADL)
No	Yes	No	No		

Component	State or local regulations
` ,	U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List; U.S New Jersey - Right to Know Hazardous Substance List

## **SECTION 16: Other information**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/20/2024

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 H-phrases		
H225	Highly flammable liquid and vapor	
H301	Toxic if swallowed	
H311	Toxic in contact with skin	
H315	Causes skin irritation	
H319	Causes serious eye irritation	
H331	Toxic if inhaled	
H335	May cause respiratory irritation	
H370	Causes damage to organs	

Safety Data Sheet (SDS), USA

# Bisphenol S ( $^{13}C_{12}$ , 98%) 100 µg/mL in methanol

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.