SAFETY DATA SHEET



1. Identification

Product identifier Bisphenol TMC Solution

Other means of identification

ItemS-14107M1Recommended useNot available.Recommended restrictionsNone known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameAddress
Chem Service, Inc.
660 Tower Lane

West Chester, PA 19380

United States

Telephone Toll Free 800-452-9994

Direct 610-692-3026

Website www.chemservice.com
E-mail info@chemservice.com

Emergency phone number Chemtrec US 800-424-9300

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

Physical hazardsFlammable liquidsCategory 2Health hazardsAcute toxicity, oralCategory 3Acute toxicity, dermalCategory 3Acute toxicity, inhalationCategory 3Serious eye damage/eye irritationCategory 2AReproductive toxicityCategory 1

Specific target organ toxicity, single exposure Category 1
Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin.

Causes serious eye irritation. Causes damage to organs. Causes damage to organs through

prolonged or repeated exposure. May damage fertility or the unborn child.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Do not breathe mist or vapor. Keep container tightly closed. Wash thoroughly after handling. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.

Material name: Bisphenol TMC Solution SDS US

If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all Response

contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Rinse mouth. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. If eye irritation persists: Get medical advice/attention.

Storage Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal

Hazard(s) not otherwise classified (HNOC) Supplemental information Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

99.99% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 99.99% of the mixture consists of component(s) of unknown long-term hazards to

the aquatic environment.

3. Composition/information on ingredients

Mixtures

Ingestion

Chemical name	Common name and synonyms	CAS number	%
Methanol		67-56-1	99.99
Bisphenol TMC		129188-99-4	0.01

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not use

mouth-to-mouth method if victim inhaled the substance. Oxygen or artificial respiration if needed. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Call a POISON CENTER or doctor/physician.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical Skin contact

advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Call a physician or poison control center immediately. Rinse mouth. If swallowed, induce vomiting immediately as directed by medical personnel. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way

valve or other proper respiratory medical device. Get medical advice/attention if you feel unwell. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye

Most important symptoms/effects, acute and delayed

irritation. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm, Keep victim under observation. Symptoms may be delayed.

General information

Take off immediately all contaminated clothing. Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Alcohol resistant foam. Water spray. Water fog. Carbon dioxide (CO2). Dry chemical powder, Suitable extinguishing media carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Material name: Bisphenol TMC Solution

Special protective equipment and precautions for firefighters

Fire fighting

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

equipment/instructions

so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific methods

General fire hazards

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area).

Large Spills: Stop the flow of material, if this is without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Dike the spilled material, where this is possible. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Never return spills to original containers for re-use.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Explosion-proof general and local exhaust ventilation. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants	(29 CFR 1910.1000)
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Components	Туре	Value	
Methanol (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
Methanol (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Methanol (CAS 67-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	
		200 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Methanol (CAS 67-56-1) Skin designation applies.

US - Tennessee OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Methanol (CAS 67-56-1) Can be absorbed through the skin.

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Not available.
Odor Not available.

Not available. Odor threshold Not available. pН

Melting point/freezing point -144.04 °F (-97.8 °C) estimated Initial boiling point and boiling 148.46 °F (64.7 °C) estimated

range

53.6 °F (12.0 °C) estimated Flash point

Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

7.3 % estimated

(%)

Flammability limit - upper

36 % estimated

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

169.3 hPa estimated Vapor pressure

Vapor density Not available. Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

867.2 °F (464 °C) estimated **Auto-ignition temperature**

Decomposition temperature Not available. Not available. **Viscosity**

Other information

0.7865 g/cm3 estimated Density

Not explosive. **Explosive properties**

Flammability class Flammable IB estimated

Oxidizing properties Not oxidizing. 99.99 % estimated Percent volatile 0.79 estimated Specific gravity VOC 99.99 % estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Strong oxidizing agents. Incompatible materials

Hazardous decomposition No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation Toxic if inhaled. May cause damage to organs by inhalation. May cause damage to organs

through prolonged or repeated exposure by inhalation.

Skin contact Toxic in contact with skin. Causes serious eye irritation. Eye contact

Toxic if swallowed. Ingestion

Material name: Bisphenol TMC Solution

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye

irritation.

Information on toxicological effects

Acute toxicity Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity -

single exposure

Causes damage to organs.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effectsCauses damage to organs through prolonged or repeated exposure. Prolonged inhalation may be

harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

 Components
 Species
 Test Results

 Methanol (CAS 67-56-1)

 Aquatic

 Crustacea
 EC50
 Water flea (Daphnia magna)
 > 10000 mg/l, 48 hours

 Fish
 LC50
 Fathead minnow (Pimephales promelas)
 > 100 mg/l, 96 hours

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Methanol -0.77

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

^{*} Estimates for product may be based on additional component data not shown.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN1230 **UN** number

UN proper shipping name Methanol, solution (Methanol RQ = 5001 LBS)

Transport hazard class(es)

Class 3 Subsidiary risk Label(s) 3 П Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB2, T7, TP2

Packaging exceptions 150 Packaging non bulk 202 Packaging bulk 242

IATA

UN1230 **UN** number

Methanol solution (Methanol) **UN proper shipping name**

Transport hazard class(es)

3 Class

6.1(PGI, II) Subsidiary risk

Packing group **Environmental hazards** No. **ERG Code** 3L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1230

UN proper shipping name METHANOL SOLUTION (Methanol)

Transport hazard class(es)

Class

6.1(PGI, II) Subsidiary risk

Packing group

Environmental hazards

Marine pollutant No. **EmS** F-E, S-D

Transport in bulk according to

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not established.

Annex II of MARPOL 73/78 and

the IBC Code

DOT



Material name: Bisphenol TMC Solution

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15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Methanol (CAS 67-56-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methanol	67-56-1	99.99

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Methanol (CAS 67-56-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause birth

defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Methanol (CAS 67-56-1) Listed: March 16, 2012

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3,

subd. (a))

Methanol (CAS 67-56-1)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (FINECS)	No

Country(s) or region Inventory name On inventory (yes/no)* Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan Yes Existing Chemicals List (ECL) Korea Yes New Zealand New Zealand Inventory No **Philippines** Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

16. Other information, including date of preparation or last revision

08-27-2018 Issue date

Version # 01

NFPA ratings Health: 4

Flammability: 3 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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This product is furnished FOR LABORATORY USE ONLY.

Material name: Bisphenol TMC Solution

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).