

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Code** 60102A0320

**Product name** TBC-W

**Other means of identification** No information available

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Stabilizer, antioxidant.

**Details of the supplier of the safety data sheet**

**Supplier / Importer**

Sun Chemical Corporation

35 Waterview Boulevard, Parsippany, New Jersey 07054, U.S.A.

TEL: +1-973-404-6000 FAX: +1-973-404-6001

Emergency TEL(CHEMTREC, account#: 21391): (INSIDE THE USA) 1-800-424-9300: (OUTSIDE THE USA) +1-703-527-3887

**Manufacturer**

DIC Corporation Chiba Plant

12, Yawata-kaigandori, Ichihara, Chiba 290-8585, Japan

TEL:+81-436-41-4112

## 2. HAZARDS IDENTIFICATION

**Classification**

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 2

**Label elements**

### Emergency Overview

**Signal word**

Danger

**Hazard statements**

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.



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<b>Appearance</b> No data available	<b>Physical state</b> liquid	<b>Odor</b> Characteristic odor
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#### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not breathe dusts or mists  
Contaminated work clothing must not be allowed out of the workplace

#### Precautionary Statements - Response

Immediately call a POISON CENTER or doctor  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
Wash contaminated clothing before reuse  
If skin irritation or rash occurs: Get medical advice/attention  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Immediately call a POISON CENTER or doctor  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth  
Do NOT induce vomiting

#### Precautionary Statements - Storage

Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Other Information

##### Hazards not otherwise classified (HNOC)

Not Applicable

#### Other hazards

- May be harmful in contact with skin
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

**Unknown acute toxicity** 84.19 % of the mixture consists of ingredient(s) of unknown toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
84.19 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name and synonyms** No data available

**Pure substance/mixture** Substance

Chemical Name	CAS No	weight-%
4-tert-Butyl-1,2-benzenediol	98-29-3	80-90
1,2-Benzenediol	120-80-9	< 1

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## 4. FIRST AID MEASURES

### First aid measures

#### **General advice**

Show this safety data sheet to the doctor in attendance. Do not delay care and transport of a seriously injured person. IF exposed or concerned: Get medical advice/attention.

#### **Inhalation**

Move victim to fresh air. Get medical attention.

#### **Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. Immediately call a POISON CENTER or doctor/physician.

#### **Skin Contact**

Immediately call a POISON CENTER or doctor/physician. Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### **Ingestion**

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get medical attention. Call a physician or poison control center immediately. Do NOT induce vomiting.

#### **Self-protection of the first aider**

Wear personal protective clothing (see section 8). Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### Most important symptoms and effects, both acute and delayed

#### **Symptoms**

Burning sensation. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. May cause blindness. Coughing and/ or wheezing. Hives. Itching. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Rashes.

### Indication of any immediate medical attention and special treatment needed

#### **Note to physicians**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization in susceptible persons.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Foam. Water spray (fog). Dry sand. Extinguishing powder.

### Unsuitable Extinguishing Media

No information available.

### Specific hazards arising from the chemical

Risk of ignition. The product causes irritation of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Product is or contains a sensitizer. The product causes burns of eyes, skin and mucous membranes.

#### Explosion data

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**Sensitivity to Mechanical Impact**  
**Sensitivity to Static Discharge**

No information available.  
No information available.

**Protective equipment and precautions for firefighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.

**Other Information**

Refer to protective measures listed in Sections 7 and 8.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment**

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up**

Use personal protective equipment as required. Clean contaminated surface thoroughly. Pick up and transfer to properly labeled containers. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

**Prevention of secondary hazards**

Local authorities should be advised if significant spillages cannot be contained.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store locked up. Store away from other materials.

**Incompatible materials**

Acids. Bases. Oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Limits**

Chemical Name	ACGIH	OSHA PEL	NIOSH IDLH
1,2-Benzenediol 120-80-9	TWA: 5 ppm S*	(vacated) TWA: 5 ppm (vacated) TWA: 20 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup>

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		(vacated) S*		
Chemical Name	Alberta	British Columbia	Ontario TWA	Quebec
1,2-Benzenediol 120-80-9	TWA: 5 ppm TWA: 23 mg/m <sup>3</sup> Skin	TWA: 5 ppm Skin	TWA: 5 ppm Skin	TWA: 5 ppm TWA: 23 mg/m <sup>3</sup> Skin

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Hand Protection** Impervious gloves.  
**Eye/face protection** Face protection shield. Tight sealing safety goggles.  
**Skin and body protection** Rubber boots. Long sleeved clothing. Impervious clothing. Chemical resistant apron.

**General Hygiene Considerations** Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Characteristic odor
<b>Appearance</b>	No data available	<b>Odor Threshold</b>	No data available
<b>Color</b>	Colorless(Clear)		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point/freezing point	4 °C / 39 °F	
Boiling point/boiling range	100 °C / 212 °F	
Flash point	Not flammable /	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limits	No data available	
Lower flammability limit	No data available	
Vapor Pressure	0.133 Pa	
Vapor density	No data available	
Specific gravity	1.063-1.069	@25°C
Solubility(ies)	Methanol. Slightly soluble in water (less than 1 ~ 10g / 1,000 ml).	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature (°C)	No data available	

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Kinematic viscosity	No data available
Dynamic viscosity	No data available

#### Other Information

Molecular weight	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Softening point	No data available
VOC Content (%)	No data available
Density	No data available
Bulk density	No data available

## 10. STABILITY AND REACTIVITY

#### Reactivity

No information available.

#### Chemical stability

Stable under normal conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

<b>Hazardous polymerization</b>	No data available.
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#### Conditions to avoid

Exposure to air or moisture over prolonged periods.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

#### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

##### **Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available Corrosive by inhalation (based on components) Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate Inhaled corrosive substances can lead to a toxic edema of the lungs Pulmonary edema can be fatal
<b>Eye contact</b>	Specific test data for the substance or mixture is not available Causes burns (based on components) Corrosive to the eyes and may cause severe damage including blindness Causes serious eye damage May cause irreversible damage to eyes
<b>Skin contact</b>	Prolonged skin contact causes burns Symptoms may be delayed Specific test data for the substance or mixture is not available May cause irritation May cause sensitization by skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons (based on components)
<b>Ingestion</b>	Specific test data for the substance or mixture is not available Causes burns (based on components) Ingestion causes burns of the upper digestive and respiratory tracts May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark

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blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking May cause lung damage if swallowed May be fatal if swallowed and enters airways

#### Information on toxicological effects

**Symptoms** Redness Burning May cause blindness Coughing and/ or wheezing Itching Rashes Hives

#### Numerical measures of toxicity

##### Acute toxicity

##### Toxic information of product

Inhalation LC50	Dermal LD50	Oral LD50
Not applicable	2,100 mg/kg(Mouse)	990 mg/kg(Mouse)

**Unknown acute toxicity** 84.19 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

84.19 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
4-tert-Butyl-1,2-benzenediol	= 815 mg/kg ( Rat )	= 1331 mg/kg ( Rabbit )	-
1,2-Benzenediol	= 260 mg/kg ( Rat )	= 800 mg/kg ( Rabbit )	-

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Prolonged skin contact causes burns.

**Serious eye damage/eye irritation** Causes burns. Classification based on data available for ingredients. Risk of serious damage to eyes.

**Respiratory or skin sensitization** May cause sensitization by skin contact.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
1,2-Benzenediol	A3	Group 2B		X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

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0.64% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
4-tert-Butyl-1,2-benzenediol		3.9 : 24h Oryzias laptis mg/L LC50, 2.7 : 48h Oryzias laptis mg/L LC50		
1,2-Benzenediol	EC50 ( 6h ): 50 - 135 mg/L ( Chlorella vulgaris )	LC50( 96h, flow-through ): = 8.9 mg/L ( Oncorhynchus mykiss ) LC50( 96h, flow-through ): = 3.5 mg/L ( Pimephales promelas )		EC50( 48h ): = 1.66 mg/L ( Daphnia magna )

#### **Persistence and degradability**

COD 1,100,000ppm.

#### **Bioaccumulation**

No data available.

#### **Mobility**

No data available.

#### **Other adverse effects**

No data available

### 13. DISPOSAL CONSIDERATIONS

#### **Waste treatment methods**

##### **Disposal of wastes**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

##### **Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Improper disposal or reuse of this container may be dangerous and illegal.

**US EPA Waste Number** D001, U154 D002.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
1,2-Benzenediol 120-80-9	-	Included in waste stream: K060	-	-

### 14. TRANSPORT INFORMATION

#### **DOT**

**UN/ID no** UN3265  
**Proper shipping name** Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol)  
**Hazard Class** 8  
**Packing Group** II  
**Special Provisions** B2, IB2, T11, TP2, TP27  
**Emergency Response Guide Number** 153  
**Description** UN3265, Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol), 8, II

#### **TDG**

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UN/ID no UN3265  
 Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol)  
 Hazard Class 8  
 Packing Group II  
 Description UN3265, Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol), 8, II

#### MEX

UN/ID no UN3265  
 Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol)  
 Hazard Class 8  
 Special Provisions 274  
 Packing Group II  
 Description UN3265, Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol), 8, II

#### IATA

UN/ID no UN3265  
 Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol)  
 Hazard Class 8  
 Packing Group II  
 ERG Code 8L  
 Special Provisions A3, A803  
 Description UN3265, Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol), 8, II

#### IMDG

UN/ID no UN3265  
 Proper shipping name Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol)  
 Hazard Class 8  
 Packing Group II  
 EmS-No F-A, S-B  
 Special Provisions 274  
 Description UN3265, Corrosive liquid, acidic, organic, n.o.s. (4-tert-Butyl-1,2-benzenediol), 8, II  
 Environmental hazard Yes

## 15. REGULATORY INFORMATION

### International Inventories

TSCA-US-Toxic Substances Control Act Complies

DSL-Canada-Domestic Substances List Complies

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No	weight-%	SARA 313 - Threshold Values %
1,2-Benzenediol - 120-80-9	120-80-9	0.17	0.1

#### **SARA 311/312 Hazard Categories**

Acute health hazard Yes  
 Chronic Health Hazard Yes  
 Fire hazard No  
 Sudden release of pressure hazard No  
 Reactive Hazard No

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### **CERCLA**

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This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
1,2-Benzenediol 120-80-9	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
1,2-Benzenediol - 120-80-9	Carcinogen

EPA Pesticide Registration Number Not Applicable

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards</b> 3 *	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> C
<i>Chronic Hazard Star Legend</i> * = Chronic Health Hazard				

**Issue date** 11-Jan-2018

**Revision Note** No data available.

#### Reference

LOLI Database (ChemADVISOR,Inc.)

#### The reference on GHS classification results

Japan National Institute of Technology and Evaluation (NITE)

EU CLP(1272/2008)Annex VI Table 3.1

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

#### Other information

End of Safety Data Sheet

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