



# SAFETY DATA SHEET

Authoring Date 29-Jan-2015  
Revision date 11-Mar-2015

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

### Product identifier

**Product Code** 60102A0340

**Product name** TBC-P

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

**Recommended Use** Stabilizer, antioxidant.

### Details of the supplier of the safety data sheet

#### **Supplier / Importer**

DIC International (USA), LLC

35 Waterview Boulevard, Parsippany, NJ

07054, U.S.A.

TEL: +1-973-404-6600 FAX:

+1-973-404-6601 Emergency TEL:

+1-800-424-9300 (account #: 21391)

#### **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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**Physical state** Solid**Odor** Characteristic odor**Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician.

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/physician.

IF ON SKIN (or hair): Remove/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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician 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**

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

**Unknown Acute Toxicity**

0.75% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Pure substance/mixture**

substance

Chemical Name	CAS No	weight-%
4-tert-Butyl-1,2-benzenediol	98-29-3	>99
1,2-Benzenediol	120-80-9	<1

**4. FIRST AID MEASURES**

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**First aid measures**

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash skin with soap and water.
<b>INHALATION</b>	Remove to fresh air.
<b>INGESTION</b>	Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

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

<b>Symptoms</b>	None known.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Caution: Use of water spray when fighting fire may be inefficient.

**Explosion data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** none.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
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**Environmental precautions**

<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
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**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** No data available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

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> (vacated) S*	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup>

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** Gloves made of plastic or rubber.

**Eye/face protection** Wear safety glasses with side shields (or goggles).



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odor</b>	Characteristic odor
<b>Appearance</b>	No data available	<b>Odor Threshold</b>	No data available
<b>Color</b>	light yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	

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Melting point/freezing point	55 °C / 131 °F	
Boiling point/boiling range	285 °C / 545 °F	
Flash point	154 °C / 309 °F	Ceta Closed Cup
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	No data available	
Vapor density	No data available	
Specific gravity	1.05	
Water solubility	0.2wt%	
Solubility(ies)	Soluble in acetone, Alcohol.	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
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 reactivity under the normal usage

**Chemical stability**

Combustibility.

**Possibility of Hazardous Reactions**

No data available.

**Conditions to avoid**

May form explosive dust-air mixtures.

**Incompatible materials**

No data available.

**Hazardous Decomposition Products**

No data available.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

INHALATION	No data available.
Eye contact	No data available.
Skin Contact	No data available.
INGESTION	No data available.

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**Information on toxicological effects****Acute toxicity**

LD/LC50 values that relevant for classification.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
4-tert-Butyl-1,2-benzenediol 98-29-3	= 2820 mg/kg ( Rat )	= 630 µL/k ( Rabbit )	-
1,2-Benzenediol 120-80-9	= 260 mg/kg ( Rat )	= 800 mg/kg ( Rabbit )	-

**Symptoms**

No data available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**4-t-butyl catechol: Necrosis was observed (brown discoloration, dark brown or black).  
(Rabbit, 60min).**Serious eye damage/eye irritation**

No data available.

**Sensitization**

No data available.

**Germ cell mutagenicity**

No data 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 120-80-9	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**

No data available.

**STOT - single exposure**

No data available.

**STOT - repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity**

0.75% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document . 990 2100

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The table below indicates component(s) of known hazards to the aquatic environment.

0.75% 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 98-29-3		3.9 : 24h Oryzias laptis mg/L LC50, 2.7 : 48h Oryzias laptis mg/L LC50		
1,2-Benzenediol 120-80-9	50 - 135: 6 h Chlorella vulgaris mg/L EC50	3.5: 96 h Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Oncorhynchus mykiss mg/L LC50 flow-through		1.66: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

COD 1,100,000ppm.

**Bioaccumulation**

No data available.

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**Mobility**

No data available.

**Other adverse effects**

No data available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** 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** UN3261  
**Proper shipping name** Corrosive solid, acidic, organic, n.o.s.  
**Hazard Class** 8  
**Packing Group** II  
**Special Provisions** IB8, IP2, IP4, T3, TP33  
**Marine pollutant** Not Applicable.  
**Emergency Response Guide Number** 154  
**Description** UN3261, Corrosive solid, acidic, organic, n.o.s., 8, II

**TDG**

**UN/ID no** UN3261  
**Proper shipping name** Corrosive solid, acidic, organic, n.o.s.  
**Hazard Class** 8  
**Packing Group** II  
**Special Provisions** none  
**Marine pollutant** Not regulated.  
**Description** UN3261, Corrosive solid, acidic, organic, n.o.s., 8, II

**MEX**

**UN/ID no** UN3261  
**Proper shipping name** Corrosive solid, acidic, organic, n.o.s.  
**Hazard Class** 8  
**Special Provisions** none  
**Packing Group** II  
**Description** UN3261, Corrosive solid, acidic, organic, n.o.s., 8, II

**IATA**

**UN/ID no** UN3261  
**Proper shipping name** Corrosive solid, acidic, organic, n.o.s.

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<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>ERG Code</b>	8L
<b>Special Provisions</b>	A3, A803
<b>Description</b>	UN3261, Corrosive solid, acidic, organic, n.o.s., 8, II

**IMDG**

<b>UN/ID no</b>	UN3261
<b>Proper shipping name</b>	Corrosive solid, acidic, organic, n.o.s.
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>EmS-No</b>	F-A, S-B
<b>Special Provisions</b>	274
<b>Marine pollutant</b>	Not regulated
<b>Description</b>	UN3261, Corrosive solid, acidic, organic, n.o.s., 8, II
<b>Environmental hazard</b>	Not Applicable

**15. REGULATORY INFORMATION****International Inventories**

**TSCA** Complies

**DSL** Complies

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List*

**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	0.2	0.1

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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**

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

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

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
4-tert-Butyl-1,2-benzenediol 98-29-3		X	X
1,2-Benzenediol 120-80-9	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR

**WHMIS Hazard Class**

D2A - Very toxic materials

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 4	Flammability 1	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 4	Flammability 1	Physical hazards 0	Personal protection C

Authoring Date 29-Jan-2015

**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

**Other information**

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