



# SAFETY DATA SHEET

Issue Date 23-May-2018

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Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** CC-2000 Hardener

### Other means of identification

**Product Code** 950BC

**Synonyms** None

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

**Recommended Use** Industrial Coatings

**Uses advised against** No information available

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

#### **Manufacturer Address**

BLOME INTERNATIONAL  
1450 Hoff Industrial Drive  
O'Fallon, MO 63366

#### **Emergency telephone number**

**Company Phone Number** 636-379-9119  
**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Gases)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2

### Label elements

#### **Danger**

#### **Emergency Overview**

#### **Hazard statements**

Harmful if inhaled  
Causes skin irritation  
Causes serious eye damage  
May cause an allergic skin reaction  
Suspected of damaging fertility or the unborn child

**Appearance** viscous paste**Physical state** Solid**Odor** Amine**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  
 Use personal protective equipment as required  
 Use only outdoors or in a well-ventilated area  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 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: Wash with plenty of soap and water  
 Take off contaminated clothing and wash 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  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful if swallowed. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**Unknown acute toxicity**

2% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%
Ceramic compounds *	Proprietary	30 - 60
Quartz *	14808-60-7	15 - 40
Isophorone diamine *	2855-13-2	5 - 10
Benzyl alcohol *	100-51-6	5 - 10
Diethylenetriamine *	111-40-0	1 - 5
Silica, amorphous, precipitated and gel *	112926-00-8	1 - 5
Bisphenol A *	80-05-7	1 - 5

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately. Wash contaminated clothing before reuse. For minor skin contact, avoid spreading material on unaffected skin. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Drink plenty of water. Do not induce vomiting without medical advice.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. 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

<b>Symptoms</b>	May cause skin irritation. May cause redness and tearing of the eyes. May result in permanent damage including blindness. May cause allergic skin reaction. Coughing and/ or wheezing.
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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. Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Runoff may pollute waterways.

##### 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**

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

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

**Methods for containment** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

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

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ceramic compounds	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	-
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust
Diethylenetriamine 111-40-0	TWA: 1 ppm S*	-	TWA: 1 ppm TWA: 4 mg/m <sup>3</sup>
Silica, amorphous, precipitated and gel 112926-00-8	-	TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA	-

**Legend**

S\* - Skin Absorber

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

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

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

<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Amine
<b>Appearance</b>	viscous paste	<b>Odor threshold</b>	No information available
<b>Color</b>	Dark gray		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	No information available		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	> 200 °C / > 392 °F		
<b>Flash point</b>	> 100 °C / > 212 °F	Pensky-Martens Closed Cup (PMCC)	
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	2.1 - 2.2		
<b>Water solubility</b>	negligible		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	Not an explosive		
<b>Oxidizing properties</b>	Not applicable		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	0 g/L
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

**Conditions to avoid**

Elevated Temperature. Incompatible materials.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**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>	Harmful by inhalation. May cause irritation.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin contact</b>	Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	Can burn mouth, throat, and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ceramic compounds	> 5000 mg/kg ( Rat )	-	-
Quartz 14808-60-7	= 500 mg/kg ( Rat )	-	-
Isophorone diamine 2855-13-2	= 1030 mg/kg ( Rat )	-	-
Benzyl alcohol 100-51-6	= 1230 mg/kg ( Rat )	= 2 g/kg ( Rabbit )	= 8.8 mg/L ( Rat ) 4 h
Diethylenetriamine 111-40-0	= 1080 mg/kg ( Rat )	= 672 mg/kg ( Rabbit )	= 70 mg/L ( Rat ) 4 h
Bisphenol A 80-05-7	= 3300 mg/kg ( Rat )	= 3 mL/kg ( Rabbit )	> 0.17 mg/L ( Rat ) 6 h

### Information on toxicological effects

<b>Symptoms</b>	May cause an allergic skin reaction. May cause skin irritation. May cause redness and tearing of the eyes. May result in permanent damage including blindness. Coughing and/ or wheezing.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	May cause sensitization in susceptible persons.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ceramic compounds	-	-	Reasonably Anticipated	X
Quartz 14808-60-7	A2	Group 1	Known	X
Silica, amorphous, precipitated and gel 112926-00-8	-	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

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

X - Present

<b>Reproductive toxicity</b>	Contains a known or suspected reproductive toxin.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Target Organ Effects</b>	Eyes, Respiratory system, Skin, lungs.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

### Numerical measures of toxicity - Product Information

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

<b>ATEmix (oral)</b>	2,342.00 mg/kg
<b>ATEmix (dermal)</b>	6,789.00 mg/kg
<b>ATEmix (inhalation-gas)</b>	10,000.00 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	21.00 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

80 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Isophorone diamine 2855-13-2	37: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	110: 96 h <i>Leuciscus idus</i> mg/L LC50 semi-static	14.6 - 21.5: 48 h <i>Daphnia magna</i> mg/L EC50 semi-static 42: 24 h <i>Daphnia magna</i> mg/L EC50
Benzyl alcohol 100-51-6	35: 3 h <i>Anabaena variabilis</i> mg/L EC50	460: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10: 96 h <i>Lepomis</i> <i>macrochirus</i> mg/L LC50 static	23: 48 h water flea mg/L EC50
Diethylenetriamine 111-40-0	1164: 72 h <i>Pseudokirchneriella</i> subcapitata mg/L EC50 345.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 592: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	248: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 430: 96 h <i>Leuciscus</i> <i>idus</i> mg/L LC50 semi-static 1014: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static	16: 48 h <i>Daphnia magna</i> mg/L EC50 37: 24 h <i>Daphnia magna</i> mg/L EC50
Bisphenol A 80-05-7	2.5: 96 h <i>Pseudokirchneriella</i> subcapitata mg/L EC50	3.6 - 5.4: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 4.0 - 5.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 4: 96 h <i>Oncorhynchus</i> <i>mykiss</i> mg/L LC50 9.9: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	10.2: 48 h <i>Daphnia magna</i> mg/L EC50 3.9: 48 h <i>Daphnia magna</i> mg/L EC50 9.2 - 11.4: 48 h <i>Daphnia</i> <i>magna</i> mg/L EC50 Static

### Persistence and degradability

No information available.

### Bioaccumulation

Chemical Name	Partition coefficient
Isophorone diamine 2855-13-2	0.79
Benzyl alcohol 100-51-6	1.1
Diethylenetriamine 111-40-0	-1.3
Bisphenol A 80-05-7	2.2

### Other adverse effects

No information 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.

Chemical Name	California Hazardous Waste Status
Diethylenetriamine 111-40-0	Toxic

#### 14. TRANSPORT INFORMATION

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

##### 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	SARA 313 - Threshold Values %
Ceramic materials -	1.0
Bisphenol A - 80-05-7	1.0

##### 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, does not contain any substances regulated as hazardous substances under the Comprehensive



Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Quartz - 14808-60-7	Carcinogen
Bisphenol A - 80-05-7	Female Reproductive

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ceramic materials	X	X	X
Quartz 14808-60-7	X	X	X
Isophorone diamine 2855-13-2	X	-	-
Benzyl alcohol 100-51-6	-	X	X
Diethylenetriamine 111-40-0	X	X	X
Silica, amorphous, precipitated and gel 112926-00-8	X	X	X
Bisphenol A 80-05-7	X	X	X

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 3	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 3	Flammability 1	Physical hazards 0	Personal protection X

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#### Revision Note

No information available

#### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**