



Material Safety Datasheet

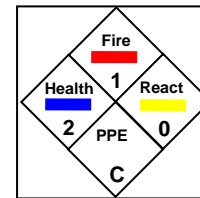
BC709 Curative Part B

Urethane Elastomer System

MSDS Version: 041714

I. Basic Information

Manufacturer: BCC Products
 Address: 2140 Earlywood Drive
 Franklin, Indiana 46131
 Emergency Phone: (317)736-4090
 Transportation Emergency Phone Number: Chem-trec 1-800-424-9300
 Chemical State: Liquid
 Chemical Type: Mixture



II. Ingredients

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
proprietary	Non-Hazardous Polyether polyol blend	60-65						NE	NE	NE
101-14-4	4,4'-Methylenebis(2-chloroaniline), MbOCA	25-30						0.02 ppm	0.01 ppm	NE
96-48-0	Gamma-butyrolactone	5-10						NE	NE	NE

III. Hazardous Identification

Hazard Category

Acute Chronic Fire Pressure Reactive

Hazardous Identification Information

- **Warning!**
- **Contains 4,4'-methylenebis(2-chloroaniline), a possible human carcinogen.**
- **Dark Liquid With Slight Odor**
- **Contact may cause skin, eye and respiratory tract irritation.**
- **Avoid moisture contamination to protect product quality.**

IV. First Aid Measures

Route(s) of entry:

Inhalation, ingestion, skin and eye contact.

Health Hazards (Acute and Chronic):

Acute (short term)

May cause skin and eye irritation or burns. Inhalation of vapors may cause respiratory tract irritation.



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Chronic (Delayed):

Repeated skin contact may produce skin irritation (burns) or sensitization in susceptible individuals

Signs and Symptoms: Skin, eye and respiratory tract irritation. Medical Conditions Generally Aggravated by Exposure:

None Known.

Emergency and First Aid Procedures:

SKIN CONTACT: Remove contaminated clothing and wash affected area with soap and water. If irritation develops, contact a physician.

EYE CONTACT: Flush eyes with water for at least 15 minutes and contact a physician.

INGESTION: INDUCE VOMITING. Take 1-2 glasses of water and contact a physician. Do not give anything by mouth to an unconscious person.

INHALATION: Remove person to fresh air. If person is not breathing, give mouth-to-mouth resuscitation and contact a physician.

Other Health Warnings:

Wash hands thoroughly after handling this material before eating, smoking, ect.

V. Fire Fighting Measures

Flash Point: >300F **Lower Explosive Limit:** NE **Upper Explosive Limit:** NE

Fire Extinguishing Media: Foam, Water Fog, Carbon Dioxide or Dry Chemical Extinguishers.

Special Fire Fighting Procedures:

Fire fighters should wear a self-contained breathing apparatus and protective clothing to guard against incompletely combusted carbon products.

Unusual Fire and Explosion:

None Known.

VI. Accidental Release Measures

Steps to be taken in case material is released or spilled:

Wear Protective equipment. Ventilate spill area. Cover liquid with an absorbent material (saw dust, vermiculite, or wet sand). After the material is absorbed scoop up and place in containers for disposal. Wash contaminated area with soapy water. Collect wash water and handle as contaminated waste. Dispose of in accordance with all local, state and federal guidelines.

US regulations require reporting spills of this material that could reach any surface waters. The toll-free number for the US Coast Guard National Response Center is (800) 424-8802.



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VII. Handling and Storage

Precautions to be taken:

Store in a cool, dry place in tightly sealed containers. Protect from moisture contamination to protect product quality.

Other Precautions:

Avoid contact with skin, eyes and clothing. Any potential hazard can be minimized by using the recommended protective equipment.

VIII. Exposure Controls / Personal Protection

Chemical Name	Exposure Limits
Non-Hazardous Polyether Polyol Blend	None established
4,4'-Methylenebis(2-chloroaniline)	ACGIH TLV = 0.01 ppm OSHA TWA = 0.02 ppm NIOSH Recommended exposure limit TWA = 0.003 mg/m3
Gamma-butyrolactone	None established

Ventilation Requirements:

Local Exhaust: Provide mechanical (general) and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Personal Protective Equipment:

Respiratory Protection: None needed at normal temperatures. Use a self-contained breathing apparatus for high concentrations and under emergency conditions.

Protective gloves: Impervious rubber or nitrile gloves.

Eye Protection: Wear safety glasses or goggles.

Other Protective Clothing or Equipment: An apron or suitable clothing to prevent skin contact.

IX. Physical and Chemical Properties

Physical State and Appearance:	Dark Liquid
Odor:	Slight amine
Flash Point:	>300°F
Boiling Point:	not established
Melting Point:	not established
Evaporation Rate:	not established
Vapor Pressure (mm Hg):	<1mmHg@25°C (77°F)
Vapor Density (Air = 1):	not established
Viscosity, cPs @ 25°C:	600
Specific Gravity:	1.10
Solubility in water:	not soluble in water
Solubility:	Ketones, alcohols
Other Information:	Percent Volatile by Volume (%) = negligible, <1%



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X. Stability and Reactivity

Stability: Stable

Incompatibility (materials and conditions to avoid): Avoid moisture to protect product quality.
Strong acids, alkalis, oxidizing agents, heat sources, sparks.

Decomposition By-Products: Carbon monoxide and carbon dioxide.

Hazardous polymerization: Will not occur.

XI. Toxicological Information

Acute Toxicity:

4,4'-methylenebis(2-chloroaniline) (MbOCA)

Oral (Rats) LD50: 1140 mg/kg

Dermal (Rabbits) LD50: > 5000 mg/kg

Irritation, skin: No data available

Eyes: No data available

Classification: NA

Potential Acute Health Effects: Not Known

Target Organs: Not Known

Carcinogenicity:

Based on evidence in animals, 4,4'-methylenebis(2-chloroaniline) is considered a potential human carcinogen [IARC 1987]. Exposure to 4,4'-methylenebis(2-chloroaniline) can affect the eyes and kidneys [ACGIH 1991]. It is considered to be a strongly suspected potential occupational bladder carcinogen. IARC examined the carcinogenicity of 4,4'-methylenebis(2-chloroaniline) in humans and determined that there was inadequate evidence, however based on animal data, the substance is considered probably carcinogenic to humans (Group 2A) [IARC 1987].

IARC: Group 1: Carcinogenic to humans (4,4'-methylenebis(2-chloroaniline))

NTP: Reasonably anticipated to be a human carcinogen (4,4'-methylenebis(2-chloroaniline))

OSHA: No component of 4,4'-methylenebis(2-chloroaniline) present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Mutagenicity: Not Known

Other Toxic Effects: Not Known

Gamma-butyrolactone

Oral (Rats) LD50: 1582 mg/kg body weight

Dermal (Rabbits) LD50: >5000g/kg

Irritation, skin: Not a skin irritant

Eyes: Severe eye irritant

Classification: NA

Potential Acute Health Effects: Not Known

Target Organs: Not Known

Carcinogenicity: Not Known

Mutagenicity: Not Known

Other Toxic Effects: Not Known



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XII. Ecological Information

4,4'-methylenebis(2-chloroaniline) (MbOCA)

General: Not Known.

Persistence and degradability: Not Known

Bioaccumulative potential: Not Known

Other Adverse Effects: Not known

Gamma-butyrolactone

Not expected to exhibit chronic toxicity to fish.

No data available regarding chronic toxicity to aquatic plants.

No data available regarding chronic toxicity to aquatic invertebrates.

XIII. Disposal Considerations

4,4'-methylenebis(2-chloroaniline) is listed as a hazardous waste under RCRA and has been assigned EPA Hazardous Waste No. U158. It is approved for land disposal after treatment only if the concentration of 4,4'-methylenebis(2-chloroaniline) in the waste or treatment residue does not exceed 35 mg/kg.

The reportable quantity of 4,4'-methylenebis(2-chloroaniline) is 10 pounds. If an amount equal to or greater than this quantity is released within a 24-hour period in a manner that will expose persons outside the facility, employers are required to do the following:

Notify the National Response Center immediately at (800) 424-8802 or at (202) 426-2675 in Washington, DC [40 CFR 302.6].

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incinerate or bury in a licensed facility.

XIV. Transportation Information

Environmentally Hazardous Substance, liquid, n.o.s.

Contains 4,4'-methylenebis(2-chloroaniline)

Hazard Class: 9

Packing Group: III

UN Number: UN3082

XV. Regulatory Information

TSCA Inventory Status: This product, or its components, are listed on, or are exempt from the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.



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SARA 313 Information: This product contains the following substances subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

4,4'-methylenebis(2-chloroaniline), CAS Number 101-14-4 (825-30%)

SARA Hazard Category:

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An Immediate Health Threat

A Delayed Health Threat

State Regulations:

California Proposition 65: This product contains a chemical identified by the state of California to cause cancer.

4,4'-methylenebis(2-chloroaniline), CAS Number 101-14-4 (825-30%)

Massachusetts Right To Know, Substance List:

4,4'-methylenebis(2-chloroaniline), CAS Number 101-14-4 (825-30%)

Pennsylvania Right To Know, Substance List:

4,4'-methylenebis(2-chloroaniline), CAS Number 101-14-4 (825-30%)

New Jersey Right To Know, Substance List:

4,4'-methylenebis(2-chloroaniline), CAS Number 101-14-4 (825-30%)

XVI. Other Information

Employers who own or operate facilities in SIC codes 20 to 39 that employ 10 or more workers and that use 10,000 pounds or more of 4,4'-methylene bis(2-chloroaniline) per calendar year are required by EPA [40 CFR Part 372.30] to submit a Toxic Chemical Release Inventory form (Form R) to EPA reporting the amount of 4,4'-methylene bis(2-chloroaniline) emitted or released from their facility annually.

Workers who may be exposed to chemical hazards should be monitored in a systematic program of medical surveillance that is intended to prevent occupational injury and disease. The program should include education of employers and workers about work-related hazards, early detection of adverse health effects, and referral of workers for diagnosis and treatment. The occurrence of disease or other work-related adverse health effects should prompt immediate evaluation of primary preventive measures (e.g., industrial hygiene monitoring, engineering controls, and personal protective equipment). A medical surveillance program is intended to supplement, not replace, such measures. To detect and control work-related health effects, medical evaluations should be performed (1) before job placement, (2) periodically during the term of employment, and (3) at the time of job transfer or termination.



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HMIS Ratings: Health – 2 Flammability - 1 Physical Hazard -0
NFPA Ratings: Health – 2 Flammability - 1 Instability - 0

0= Minimal
1= Slight
2= Moderate
3= High
4= Extreme

MSDS Revision History

9/10/12: New Issue
4/17/14: Reviewed and approved.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BCC Products shall not be held liable for any damage resulting from handling or from contact with the above product.

In this document, the following abbreviations were used:

NA = Not Applicable
NE = Not Established