SAFETY DATA SHEET



Date Prepared : 02/09/2015 SDS No : BC8860A Date Revised : 07/22/2015 Revision No : 2

BC 8860 A

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BC 8860 A

MANUFACTURER

BCC Products/Blehm Plastics 2140 Earlywood Drive P.O. Box 327 Franklin, IN 46131 **Customer Service:** (317) 736-4090

24 HR. EMERGENCY TELEPHONE NUMBERS

FOR CHEMICAL EMERGENCY CALL CHEMTREC (24 HOURS) 1-800-424-9300 (U.S., Canada, Puerto Rico, Virgin Islands) 1-703-527-3887 (Outside above area, collect calls accepted)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2 Skin Sensitization, Category 1 Eye Irritation, Category 2 Respiratory Sensitization, Category 1 Target Organ Toxicity (Single exposure), Category 3

GHS LABEL

<u>USA:</u> This material is considered a hazardous chemical by the OSHA Hazard Communication Standard (29 CFR 1910.1200) (2012).

Canada: This is a controlled product under WHMIS.



SIGNAL WORD: DANGER

HAZARD STATEMENTS

H335: May cause respiratory irritation.

- H317: May cause an allergic skin reaction.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

PRECAUTIONARY STATEMENTS

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P285: In case of inadequate ventilation wear respiratory protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water/...

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P262: Do not get in eyes, on skin, or on clothing.

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Poly[oxy(methyl-1,2-ethanediyl)], .alphahydroomegahydroxy-, polymer with 1,1'-methylenebis[4- isocyanatocyclohexane] and .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omegahydroxypoly[oxy(methyl- 1,2-ethanediyl)]]	60 - 80	66101-60-8
4,4'-methylenedi(cyclohexyl Isocyanate)	15 - 30	5124-30-1

4. FIRST AID MEASURES

EYES: Gently blot or brush away excess chemical quickly.

If produt is a solid in the eye(s): Do not allow victim to rub eye(s). Let the eye water naturally for a few minutes. Have victim look right and left, and then up and down. If particle/dust is not removed, flush with lukewarm, gently flowing water for 5 minutes or until particle/dust is removed, while holding the eyelid(s) open. If irritation persists, obtain medical attention. DO NOT attempt to manually remove anything stuck to the eye(s).

If product is a liquid: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 5 minutes, or until the chemical is removed, while holding the eyelid(s) open. If irritation persists, repeat flushing. Obtain medical attention immediately.

SKIN: Remove material from skin immediately by washing with non-abrasive soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watch bands. Suitable emergency safety shower facility should be immediately available.

INGESTION: Contact a physician or poison control center immediately. Do NOT induce vomiting. never give anything by mouth to an unconscious person. Rinse mouth with water. quickly transport victim to an emergency care facility.

INHALATION: Move exposed person to fresh air. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritaion, allergic symptoms.

SKIN: Direct contact causes moderate to severe irritation; prolonged skin contact may cause burns. Isocyanates, in general, can cause skin discoloration (staining) and hardening of the skin after repeated exposures. Skin sensitization, resulting in dermatitis, may occur in some individuals.

INGESTION: Irritation of the tissues of the mouth, throat and digestive tract. Other symptoms include headache, shortness of breath, nausea, vomiting, weakness, burning sensation on the mouth, abdominal pain. Onset of symptoms may be delayed.

INHALATION: Respiratory tract irritaion and mucous membrane irritaion. Symptoms include eye and nose irritation, dry and sore throat, runny nose, shortness of breath, wheezing and laryngitis. Coughing and chest pain may also occur, frequently at night. These symptoms may occur during exposure or may be delayed several hours. Exposure to isocyanatescan cause difficulty breathing or asthmatic reaction.

ADDITIONAL INFORMATION: First aid providers should avoid direct contact with this chemical.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog to cool fire; carbon dioxide, foam, or dry chemical to extinguish the fire. Alcohol resistant foams are preferred for larger fires. Use water spray to cool fire-exposed containers.

HAZARDOUS COMBUSTION PRODUCTS: Products of combustion may include isocyanate vapours, carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen oxides, dense smoke and irritating or toxic fumes.

EXPLOSION HAZARDS: Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture closed containers. Elevated temperatures accelerate this reaction. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

FIRE FIGHTING EQUIPMENT: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in possitive pressure mode. When using water care must be taken since the reaction between water and hot HMDI can be vigorous.

SENSITIVE TO STATIC DISCHARGE: Not Available

SENSITIVITY TO IMPACT: NA = Not Applicable

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike and absorb Isocyanate with suitable absorbent material. Shovel into open container. Do not make container pressure tight. Move container to a well ventillated area (outside). Spill area can be decontaminated with the following recommended solution: MIxture of 90% water, 8% concentrated amonia, 2% detergent. Add at a 10:1 ratio with silled material. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LAND SPILL: Prevent spills from breaching containment.

AIR SPILL: Avoid release to the environment.

SPECIAL PROTECTIVE EQUIPMENT:

Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated contact with skin. Use adequate ventillation. Wash thoroughly after handling. Keep container tightly closed.

STORAGE: Store in a cool, dry, well-ventilated area away from incompatible substances. Protect from atmospheric moisture. Do not store product contaminated with water to prevent potential hazardous reaction. Do not re-seal contaminated containers.

STORAGE TEMPERATURE: 16°C (60°F) Minimum to 38°C (100°F) Maximum

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety goggles. Wear a face shield or full-face respiratory protection when necessary to prevent eye and inhalation exposures.

SKIN: Wear chemical protective gloves, coveralls, boots and/or other resistant protective clothing to prevent skin exposure. Evaluate resistance under conditions of use and maintain protective clothing carefully.

RESPIRATORY: In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

PROTECTIVE CLOTHING: Cover as much exposed skin as possible to prevent all skin contact. Suitable materials may include, saran-coated material, depending on conditions of use.

OTHER USE PRECAUTIONS: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR THRESHOLD: Not Available APPEARANCE: Transluscent, milky appearance COLOR: White to pale yellow pH: NA = Not Applicable FLASH POINT AND METHOD: 211°C (411°F) PMCC FLAMMABLE LIMITS: 0 to 0 AUTOIGNITION TEMPERATURE: > 220°C (428°F) SOLUBILITY IN WATER: Insoluble EVAPORATION RATE: Not Available DENSITY: 8.9 (VOC): 110.000

10. STABILITY AND REACTIVITY

REACTIVITY: Products based on diisocyanates react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased with stirring or if the other material acts as a solvent. Products based on diisocyanates like MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. Reaction with water will generate carbon dioxide and heat.

CONDITIONS TO AVOID: Heat, moisture and direct sunlight.

INCOMPATIBLE MATERIALS: Water, amines, alcohols, acids, bases, organotin catalysts, amides, phenols, mercaptans, urethanes, ureas, and surface active compounds.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 10000 Rabbit: mg/kg Methylene bis (4-cyclohexylisocyanate)

ORAL LD₅₀: 1650 rat; mg/kg Methylene bis (4-cyclohexylisocyanate)

INHALATION LC₅₀: 295-434 rat: mg/m3 / 4 hrs. (aerosol) Methylene bis (4-cyclohexylisocyanate)

EYE EFFECTS: HMDI causes severe eye iritation and corneal injury in rabbits.

SKIN EFFECTS: Severe skin irritant in animal studies. Application of undiluted HMDI to the skin of rabbits for 24 hours produced corrosive injury.

CHRONIC: Inhalation: Airborne vapour and aerosol of HMDI is a severe respiratory irritant. Long-term, low level exposure could cause severe, permanent respiratory impairment.

CARCINOGENICITY

IARC: No

NTP: No

OSHA: No

SENSITIZATION: May cause allergy or asthma symptoms or breathing sifficulties if inhaled. May cause an allergic skin reaction. Isocyanates are known to cause skin and respiratory sensitization in humans. Animal tests have indicated that respiratory sensitization can result from skin contact with diisocyanates. Respiratory sensitization can develop in people working with HMDI and othe diisocyanates. Sensitized individuals react to very low levels of diisocyanates, below the level of exposure limit of 0.005 ppm. Symptoms may initially appear to be a cold or mild hay fever; severe asthmatic symptoms can develop and include wheezing, chest tightness, shortness of breath, difficulty breathing and/or coughing. Fever, chills, general feelings of discomfort, headach and fatigue can also occur.

NEUROTOXICITY: Not Available

GENETIC EFFECTS: Not Available

REPRODUCTIVE EFFECTS: Not Available

TARGET ORGANS: Long-term, low-level exposure may cause severe, permanent respiratory impairment.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: Not Available

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 1.2 Brachydanio rerio: mg/l [static]

COMMENTS: Not readily biodegradable

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incinerate or otherwise dispose of in compliance with all applicable federal, state and local environmental control laws and regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s.

TECHNICAL NAME: [4,4'-methylenedi(cyclohexylisocyanate)]

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: 3082

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 5000 LBS

OTHER SHIPPING INFORMATION: NOTE! In NON-BULK Packages under 25,000 lbs. this material contains less than the Reportable Quantity of a Hazmat substance and does not require Hazmat Labelling.

AIR (ICAO/IATA)

SHIPPING NAME: AVIATION REGULATED LIQUID, N.O.S.

TECHNICAL NAME: [4,4'-methylenedi(cyclohexylisocyanate)]

UN/NA NUMBER: 3334

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s.

TECHNICAL NAME: [4,4'-methylenedi(cyclohexylisocyanate)]

UN/NA NUMBER: 3082

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s. TECHNICAL NAME: [4,4'-methylenedi(cyclohexylisocyanate)] UN/NA NUMBER: 3082 PRIMARY HAZARD CLASS/DIVISION: 9 PACKING GROUP: III

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: 4,4" -methylenedi(cyclohexyl isocyanate, 1% de minimus

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
4,4'-methylenedi(cyclohexyl Isocyanate)	15 - 30	5124-30-1

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: 4,4" -methylenedi(cyclohexyl isocyanate, 5000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
4,4'-methylenedi(cyclohexyl Isocyanate)	5124-30-1

TSCA STATUS: All chemical components of this product are in compliance with TSCA inventory requirements.

CALIFORNIA PROPOSITION 65: This product contains no substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

CARCINOGEN: No

CANADA

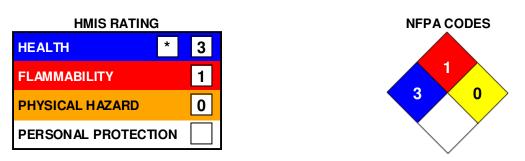
WHMIS HAZARD SYMBOL AND CLASSIFICATION



WHMIS CLASS: D2A: Material causing other toxic effects (due to respiratory sesitization. DOMESTIC SUBSTANCE LIST (INVENTORY): Reported/included

16. OTHER INFORMATION

PREPARED BY: W. MillerDate Revised: 07/22/2015REVISION SUMMARY: This SDS replaces the 07/22/2015 SDS.



MANUFACTURER DISCLAIMER:

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.