



MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

FOR CHEMICAL
EMERGENCY

Call ChemTrec day/night:
1-800-424-9300

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DOUBLE BUBBLE GREEN/BEIGE D50 PACKAGE DATE PREPARED: JULY 8, 2013
PART NUMBER: 74417 / PART A REPLACES: JUNE 20, 2005
PRODUCT TYPE: POLYMERIC DIISOCYANATE CHROMATE INDUSTRIAL CORPORATION
5250-A NAIMAN PARKWAY, SOLON, OH 44139 • (888) 567-2206

SECTION 2 — INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients	CAS Number
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Methylene bis(phenylisocyanate)(MDI)	101-68-8
Trade secret	Trade secret
Trade secret	Trade secret

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory.

Hazard Rating: Health: 3 Fire: 1 Reactivity: 1

SECTION 3 — HAZARDS IDENTIFICATION

Health Hazard Information:

Eye contact: May cause eye irritation. Corneal damage possible.

Skin contact: May cause irritation. Prolonged or repeated contact may cause rash, reddening, swelling, and in some cases, skin sensitization.

Inhalation: At room temperature vapors are minimal due to low vapor pressure. However, heating or spraying may generate vapor concentrations sufficient to cause irritation. Excessive exposure may cause irritation of the eyes, upper respiratory tract, and lungs. May cause respiratory sensitization in susceptible individuals. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Effects may be delayed. Impaired lung function (decreased ventilatory capacity) has been associated with overexposure to isocyanates.

Ingestion: May cause irritation and corrosive action in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Other health information:
(Polymeric MDI CAS 101-68-8) Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/Polymeric MDI aerosols.

Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

In laboratory animals, MDI/Polymeric MDI did not produce birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

Animal tests have also indicated that respiratory sensitization can result from skin contact with MDI. Use skin protection.

SECTION 4 — FIRST AID MEASURES

Eyes: Wash with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

Skin: Wash with soap and plenty of warm water.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Ingestion: If swallowed seek medical attention. Do not induce vomiting unless directed to do so by medical personnel. Give nothing by mouth if person is unconscious or having convulsions.

SECTION 5 — FIREFIGHTING MEASURES

Flammability Class III B
Flash Range: Not Available
 Pensky-Martens Closed Cup ASTM D 93
 >400F
Explosive Range: Not Available.

Fire-fighting measures:

- Water spray
- Dry chemical
- Foam
- Carbon dioxide

Use full turnout gear including self-contained breathing apparatus (SCBA). During a fire, polymeric diphenylmethane diisocyanate (MDI) vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. At temperatures greater than 400°F, Polymeric MDI can polymerize and decompose which can cause pressure build-up in closed containers. Explosive rupture is possible. Therefore, use cold water to cool fire-exposed containers.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Spills:

Shut off all ignition sources and dike spill to contain and prevent entry into sewers or water sources. Absorb spilled material and place into open top containers. Do not make pressure tight. Transport to a well-ventilated area (outside) and treat with neutralizing solution consisting of a mixture of 85% water, 5% concentrated ammonium hydroxide and 10% sodium carbonate. Add about 10 parts of neutralizer per part of isocyanate with mixing. Allow to stand for 48 hours letting evolved carbon dioxide to escape. If temporary control of isocyanate vapor is required, a blanket of protein foam (available at most fire departments) may be placed over the spill. Controlled incineration. Handle in compliance with local, state, and federal environmental protection agency regulations.

SECTION 7 — HANDLING AND STORAGE

Storage conditions:

Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Optimum storage temperature is 80°F to 100°F.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
Methylene bis (phenylisocyanate) (MDI)	0.0050 PPM	N/est	N/est	N/est	0.0200 PPM
Trade secret	N/est	N/est	N/est	N/est	N/est
Trade secret	N/est	N/est	N/est	N/est	N/est

Personal protective equipment:

Atmospheric levels should be maintained below the exposure guide line. When respiratory protection is required for certain operations, use an approved positive-pressure supplied-air respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

This product has poor warning properties, since recognition of an odor is far above the TLV. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, or apron will depend on operation. Local exhaust is recommended.

Chemical splash goggles. In a splash environment chemical goggles and full face shield should be worn. Chemical resistant protective clothing to minimize exposure. Eye wash station and safety shower should be available for emergency use.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Boiling Range:	Not Available
Vapor Pressure (mmHg):	Not Available
Melting Point:	Not Applicable
Evaporation Rate:	Unavailable
% Volatile:	Not Available
Specific Gravity:	1.11

SECTION 10 — STABILITY AND REACTIVITY

Stability:	This product is stable.
Hazardous Polymerization:	Hazardous polymerization may occur.
Reactivity:	
Incompatibility:	
Oxidizing agents	
Amines	
Alcohols	
Water	
Acids and caustic alkali solutions.	
Conditions to avoid:	
High temperatures.	
Hazardous decomposition products:	
Carbon monoxide, carbon dioxide, isocyanate-containing vapor.	

SECTION 11 — TOXICOLOGICAL INFORMATION

Lethal Dose Information (PPM)	Oral	Skin	Inhale	LC50
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Toxicological information: No information is available.

SECTION 12 — ECOLOGICAL INFORMATION

No information is available.

SECTION 13 — DISPOSAL CONSIDERATIONS

RCRA considerations:
This product if disposed of in the purchased form is not considered RCRA hazardous.

SECTION 14 — TRANSPORT INFORMATION

UN Number	
UN Pack Group	
UN Class	
ICAO/IATA Class	Not regulated
IMDG Class	Not regulated
Shipping Name	Plastic liquid, nos
ADR/RID Class	Not regulated
DOT Hazard Class	
Technical Name	

SECTION 15 — REGULATORY INFORMATION**SARA TITLE III SECTION 313:**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Chemical Name	CAS Number	%
METHYLENE BIS(PHENYLISOCYANATE)(MDI)	101-68-8	15 - 40

SECTION 15 — REGULATORY INFORMATION (CONT.)

TSCA Status: All ingredients contained in this product are on the TSCA inventory.
Schedule B number: 3506.91.0000 Is the schedule B export classification number.
Proposition 65 information: 74417 part A does not contain any chemical, known by the state of California, to cause cancer/reproductive toxicity.

SECTION 16 — OTHER INFORMATION

Disclaimer:

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Chromate Industrial Corp. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Chromate Industrial Corp. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose of any nature are made hereunder with respect to information or the product to which information refers.



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SECTION 2 — INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredients	CAS Number
Trade secret	Trade secret
Ground limestone	Trade secret
Kaolin	Trade secret
Trade secret	Trade secret
Titanium dioxide	Trade secret

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory.

Hazard Rating: **Health:** 1 **Fire:** 1 **Reactivity:** 0

SECTION 3 — HAZARDS IDENTIFICATION

Health Hazard Information:

Eye contact:	May cause minor eye irritation.
Skin contact:	May cause slight skin irritation.
Inhalation:	This product is not expected to be an inhalation hazard.
Ingestion:	No significant signs or symptoms indicative of any adverse health effect are expected to occur as a result of ingestion.

SECTION 4 — FIRST AID MEASURES

Eyes:	Immediately wash with running water for at least 15 minutes. Get immediate medical attention.
Skin:	Wash affected areas with soap and plenty of water. Remove and launder contaminated clothing before reuse. Get medical attention if irritation develops.
Inhalation:	Move person to fresh air. Aid in breathing, give oxygen if necessary. Get immediate medical attention.
Ingestion:	Drink two glasses of water and immediately induce vomiting. Never give fluids if victim is unconscious or having convulsions. Seek immediate medical attention.

SECTION 5 — FIREFIGHTING MEASURES

Flammability Class	IIIB
Flash Range:	Not Available Pensky-Martens Closed Cup ASTM D 93 >200F
Explosive Range:	Not Available.

Fire-fighting measures:

Use water fog, dry chemical, foam, carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and provide protection to the people attempting to stop the leak. Use full turnout gear including self-contained breathing apparatus (SCBA).

Fire exposed containers may build pressure and burst.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Spills:

Shut off all ignition sources and dike spill to contain and prevent entry into sewers or water sources. Absorb spilled material and place in closed container for disposal. Controlled incineration. Handle in compliance with local, state, and federal environmental protection agency regulations.

SECTION 7 — HANDLING AND STORAGE

Storage conditions:

Store in a cool, dry place. Keep away from open flames and high temperatures.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
Trade secret	N/est	N/est	N/est	N/est	N/est
Ground limestone	10.0000 mg/M3	N/est	N/est	N/est	N/est
Kaolin	10.0000 mg/M3	N/est	N/est	N/est	15.0000 mg/M3
Trade secret	N/est	N/est	N/est	N/est	N/est
Titanium dioxide	10.0000 mg/M3	N/est	N/est	N/est	15.0000 mg/M3

Personal protective equipment:

In the absence of proper environmental control or ventilation, wear a respirator approved by NIOSH/MSHA whenever exposed to fumes or vapors. Comply with OSHA 1910.134 (CFR). Self-contained breathing apparatus in high concentrations. Local exhaust is recommended. Use chemical resistant protective gloves, chemical splash goggles. Chemical resistant protective clothing to minimize exposure; chemical splash apron, full face shield. Eye wash station and safety shower should be available for emergency use.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance/Color:	White
Boiling Range:	Not Available
Vapor Pressure (mmHg):	Not Available
Melting Point:	Not Applicable
Evaporation rate:	Unavailable
% Volatile:	Not available
Specific gravity:	1.48

SECTION 10 — STABILITY AND REACTIVITY

Stability:	This product is stable.
Hazardous polymerization:	Hazardous polymerization will not occur.
Reactivity:	
Incompatibility:	Oxidizing agents, water.
Conditions to avoid:	High temperatures.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide.

SECTION 11 — TOXICOLOGICAL INFORMATION

Lethal Dose Information (PPM)	Oral	Skin	Inhale	LC50
Toxicological information: No information is available.				

SECTION 12 — ECOLOGICAL INFORMATION

No information is available.

SECTION 13 — DISPOSAL CONSIDERATIONS**RCRA considerations:**

This product if disposed of in the purchased form is not considered RCRA hazardous.

SECTION 14 — TRANSPORT INFORMATION**UN Number****UN Pack Group****UN Class**

ICAO/IATA Class Not regulated

IMDG Class Not regulated

Shipping Name Plastic liquid, nos

ADR/RID Class Not regulated

DOT Hazard Class**Technical Name****SECTION 15 — REGULATORY INFORMATION**

TSCA Status: All ingredients contained in this product are on the TSCA inventory.

Schedule B number: 3506.91.0000 Is the schedule B export classification number.

Proposition 65 information: 74417 part B does not contain any chemical, known by the state of California, to cause cancer / reproductive toxicity.

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