Material Safety Data Sheet

Crystal Clear Series

MSDS No. 480

Date Of Preparation: June 2, 2011

Revision: 0005

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Crystal Clear Series Part A
General Use: Polyurethane Elastomer
Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042,
Phone (610) 252-5800, FAX (610) 252-6200
Emergency Contact: Chem-Tel
Domestic 800-255-3924 International 813-248-0585

Section 2 - Hazards Identification

Hazard Designation:

Europe

T: Toxic

Canada

HMIS	
H	3
F	1
R	1

Information pertaining to particular dangers

Risk Phrases:
R23: Toxic by inhalation
R36/37/38: Irritating to eyes, respiratory system and skin
R42/43: May cause sensitization by inhalation and skin contact.

Classified according to Articles 6 & 7of Directive 1999/45/EC

Section 3 - Composition / Information on Ingredients

Component	ACGIH TWA	OSHA PEL	Hazard Designation	Weight Percent (%)
Dicyclohexylmethane-4, 4'-diisocyanate CAS Number: 5124-30-1 EINECS Number: 225-863-2	0.005 ppm	0.01 ppm	T = Toxic	75-85

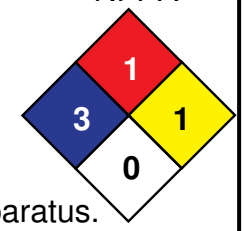
Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.
Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.
Skin Contact: In case of skin contact, wash thoroughly with soap and water; remove contaminated clothing and launder before reuse; seek medical attention if rash develops.
Ingestion: Do not induce vomiting unless instructed by a physician. Contact physician immediately
After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

Flash Point: 369°F (187.2°C) **LEL:** Not Established **UEL:** Not Established
Flash Point Method: PMCC
Flammability Classification: Non-Flammable
Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam
Unusual Fire or Explosion Hazards: Hazardous decomposition products may be formed. Avoid water contamination in closed containers or confined areas as exothermic heat and carbon dioxide can evolve.

NFPA



Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus. Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Only properly protected personnel should remain in the spill area; dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely**.**
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Avoid moisture contamination. Reseal partial containers. Use good general housekeeping procedures.
Storage Requirements: Store in cool dry, well-ventilated area.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance : Colorless liquid
Odor : Musty odor
Vapor Pressure: <0.001 mmHg @ 25°C
Vapor Density (Air=1): None Established
Specific Gravity (H_2O=1, at 4 °C): 1.08

Water Solubility: Negligible, Reacts with water
Boiling Point: None Established
% Volatile: Nil
Freezing/Melting Point: None Established
Viscosity: 2.5 poise
Evaporation Rate: Not Applicable

Section 10 - Stability and Reactivity

Stability: These products are stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization can occur.
Chemical Incompatibilities: Strong bases, water, amines, alcohols.
Conditions to Avoid: Avoid contamination with water and other materials that react with Isocyanates.
Hazardous Decomposition Products: Dicyclohexylmethane-4, 4'-diisocyanate vapors, hydrogen cyanide gas, and oxides of nitrogen, carbon monoxide and carbon dioxide.

Section 11- Toxicological Information

Acute Toxicity:
Oral LD 50: Greater than 11,000 mg/kg (Rat)
Dermal LD50: 10,000 mg/kg (Rabbit)
Not corrosive according to D.O.T corrosivity test (49CFR173.136)

Eye Effects: Irritation
Skin Effects: Irritation

Mutagenicity: Negative Ames test
Teratogenicity: None Determined

Section 12 - Ecological Information

None Established

Section 13 - Disposal Considerations

Disposal: These materials must be disposed of in accordance with applicable Federal, state and local regulations. Incineration is the best possible method for disposal.

Section 14 - Transport Information

DOT	IATA	IMDG
Not Regulated	Not Regulated	Not Regulated

Section 15 - Regulatory Information

United States EPA Regulations:

SARA Toxic Chemical (40 CFR 372.65): This product contains the following chemicals that are subject to release reporting requirements under section 313 of SARA Title III.

Chemical Name	CAS #	% by Weight
Dicyclohexylmethane-4, 4'-diisocyanate	5124-30-1	85.0 Max

TSCA Inventory Status (40 CFR710): All components of these products are listed in the TSCA Inventory.

Section 15 - Regulatory Information (continued)

California Proposition 65**:** These products do not intentionally contain any chemicals, which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

Canadian Regulations;

WHMIS Identification: **D2A, D2B**
CDSL/NDL (Canadian Domestic Substance List/Non Domestic Substance List): **Listed on CDSL**

Labeling according to EEC Directive

Risk Phrases	Symbol(s) Required for EU Label	Safety Phrases
R23: Toxic by inhalation **R36/37/38**: Irritating to eyes, respiratory system and skin **R42/43**: May cause sensitization by inhalation and skin contact.	 **(T:Toxic)**	**S1/2:** Keep locked up and out of reach of children **S26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice **S28:** After contact with skin, wash immediately with plenty of soap and water. **S38:** In case of insufficient ventilation, wear suitable respiratory equipment. **S45:** In case of an accident or if you feel sick , seek medical attention

16 - Other Information

Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA)Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 1907/2006/EEC (REACH). Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European Union (EU/EEC) directive 1907/2006/EEC and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directives.

Material Safety Data Sheet

Crystal Clear Series

MSDS No. 480

Date Of Preparation: June 2, 2011

Revision: 0005

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Crystal Clear Series Part B
General Use: Polyurethane Elastomer
Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042
Phone (610) 252-5800, FAX (610) 252-6200
Emergency Contact: Chem-Tel
Domestic 800-255-3924
International 813-248-0585

Section 2 - Hazards Identification

Potential Health Effects

Hazard Designation:

Europe

Xn: Harmful

Canada

HMIS	
H	2
F	1
R	0

Risk Phrases pertaining to particular dangers:
R20/21/22: Harmful by inhalation, contact with skin and if swallowed.
R33: Danger of cumulative effects.
R52/R53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classified according to Articles 6 & 7of Directive 1999/45/EC

Section 3 - Composition / Information on Ingredients

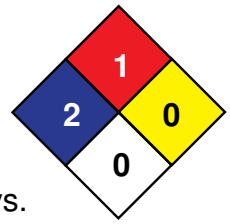
Component	ACGIH TWA	OSHA PEL	Hazard Designation	Weight Percent (%)
Polyol /Plasticizer Blend (Non-Hazardous)	None Established	None Established	None	99.6- 99.8
Phenylmercuric neodecanoate CAS Number: 26545-49-3 EINECS Number: 247-783-7	None Established	None Established	Xn	0.2-.0.4

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air.
Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.
Skin Contact: In case of skin contact, wash thoroughly with soap and water; remove contaminated clothing and launder before reuse; seek medical attention if rash develops.
Ingestion: Do not induce vomiting unless instructed by a physician. Contact physician immediately.
After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

NFPA



Flash Point: >365°F (185°C)
Flash Point Method: TCC
Flammability Classification: Non-Flammable
Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam
Unusual Fire or Explosion Hazards: None
Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus. Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Dike and contain spill; absorb or scrape up excess into suitable container for disposal. Stop or reduce discharge if it can be done safely.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Use good general housekeeping procedures.
Storage Requirements: Store in cool dry, well-ventilated area.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Clear colorless liquid
Odor: Mild odor
Vapor Pressure: None (Polymeric Resin)
Vapor Density (Air=1): >1
Specific Gravity (H_2O=1, at 4 °C): 1.03
Water Solubility: Negligible:
Boiling Point: None (Polymeric Resin)
% Volatile: Nil
Freezing/Melting Point: None Determined
Viscosity: 8 poise
Evaporation Rate: None (Polymeric Resin)

Section 10 - Stability and Reactivity

Stability: These products are stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization can not occur.
Chemical Incompatibilities: Strong acids and oxidizers.
Conditions to Avoid: Avoid contamination with water and other materials that react with amines.
Thermal Decomposition Products: Oxides of nitrogen, carbon monoxide and carbon dioxide

Section 11- Toxicological Information

Toxicity Data:

Acute Inhalation Effects: None Established
Acute Oral Effects: None Established
Reproductive Toxicity: None Established
Mutagenicity: None Established
Teratogenicity: None Established
Sensitization: None Established

Section 12 - Ecological Information

None Established

Section 13 - Disposal Considerations

Disposal: These materials must be disposed of in accordance with applicable Federal, state and local regulations.

Section 14 - Transport Information

DOT	IATA	IMDG
Not Regulated	Not Regulated	Not Regulated

Section 15 - Regulatory Information

United States EPA Regulations:

SARA Toxic Chemical (40 CFR 372.65): This product contains the following chemicals that are subject to release reporting requirements under section 313 of SARA Title III.

Components That Require Reporting	RQ	% of Reportable Component
Mercury (as part of catalyst)	1 lb.	0.074

TSCA Inventory Status (40 CFR 710): All components of these products are listed on the TSCA inventory.

California Proposition 65: These products contain a mercury compound, which has been identified by the state of California to cause birth defects or other reproductive harm.

Section 15 - Regulatory Information (continued)

Canadian Regulations;

WHMIS Identification: **D2A, D2B**
CDSL/NDL (Canadian Domestic Substance List/Non Domestic Substance List): **Listed on CDSL**

Labeling according to EEC Directive

R20/21/22: Harmful by inhalation, contact with skin and if swallowed. **R33:** Danger of cumulative effects. **R52/R53**: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	 **Xn = Harmful**	**S1/2:** Keep locked up and out of reach of children. **S3:** Keep in a cool place. **S28:** After contact with skin, wash immediately with plenty of soap and water. **S35**: This material and its container must be disposed of in a safe way. **S45:** In case of an accident or if you feel sick , seek medical attention. **S61:** Avoid release to the environment. (See MSDS). .

16 - Other Information

Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

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