


SAFETY DATA SHEET (SDS)

Section 1. Identification		
Product identifier	MC Crystal polyuréthane hydroréactif	
Other means of identification	None	
Recommended use and restrictions on use	Varnish	
Initial supplier identifier	MC Crystal Distribution, 11 000 Sherbrooke Est, Suite B-20, Montréal-Est QC H1B 5W1 Téléphone : 514-640-1929 1-866-840-1929 E-mail : info@mc-crystal.com Website : mc-crystal.com	
Emergency telephone number/restriction on use	Canada – CANUTEC 24 hour number 613-996-6666	
Section 2. Hazard identification		
Classification of hazardous product (name of the category or subcategory of the hazard class)		
Flammable liquids (category 3) Skin irritation (category 2) Eye irritation (category 2B) Respiratory sensitisation (Category 1) Skin sensitisation (Category 1) Carcinogenicity (Category 2) Aspiration hazard (Category 1)		
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)		
 <p>Danger H226 Flammable liquid and vapor. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H320 Causes eye irritation. H333 May be harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H351 Suspected of causing cancer. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands/nails/face thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 Wear respiratory protection. P301 + P310 IF SWALLOWED: Immediately call a doctor. P331 DO NOT INDUCE VOMITING. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water. P302 + P352 IF ON SKIN: wash with plenty of water. P333 + P313 IF SKIN irritation or rash occurs: Get medical attention. P362 + P364 Take off contaminated clothing and wash it before reuse. 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 attention. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342 + P311 If experiencing respiratory symptoms: Call a doctor. P308 + P313 IF exposed or concerned: Get medical attention. P370 + P378 In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.</p>		
Other hazards known	None	
Section 3. Composition/information on ingredients		
Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Prepolymer of TDI	Undisclosed	30-60 %
1-Chloro-4-(trifluoromethyl)benzene	98-56-6	30-60 %
Xylenes	1330-20-7	5-10 %
Ethyl benzene	100-41-4	1-5 %

1-Methoxy-2-acetoxypropane	108-65-6	3-7 %
Diisocyanate of toluene-2,4 (TDI)	584-84-9	0.1-1.0 %
Diisocyanate of toluene-2,6 (TDI)	91-08-7	0.1-1.0 %

Section 4. First-aid measures	
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a doctor.
Ingestion	IF SWALLOWED: Immediately call a doctor. DO NOT INDUCE VOMITING. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Skin contact	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water (15-20 minutes). IF SKIN irritation or rash occurs: Get medical attention.
Eye contact	If in eyes: Rinse cautiously with water for several minutes (15-20 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. IF eye irritation persists: Get medical attention.
Most important symptoms and effects (acute or delayed)	Skin and eye irritant. May be harmful if inhaled.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.
Section 5. Fire-fighting measures	
Specific hazards of the hazardous product (hazardous combustion products)	
Carbon oxides and other irritant/toxic gases and fumes.	
Suitable and unsuitable extinguishing media	
In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish.	
Special protective equipment and precautions for fire-fighters	
During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.	
Section 6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	
Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).	
Methods and materials for containment and cleaning up	
Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.	
Section 7. Handling and storage	
Precautions for safe handling	

<p>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.</p> <p>Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.</p>
<p>Conditions for safe storage, including any incompatibilities</p>
<p>Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.</p>
<p style="text-align: center;">Section 8. Exposure controls/Personal protection</p>
<p>Control parameters (biological limit values or exposure limit values and source of those values)</p>
<p>Exposure limits: CAS 1330-20-7 ACGIH – TLV-TWA 100 ppm (STEL 150 ppm) & PEL-TWA 100 ppm; CAS 100-41-4 ACGIH – TLV-TWA 20 ppm & PEL-TWA 100 ppm; CAS 108-65-6 ACGIH – TLV-TWA 50 ppm; CAS 584-84-9 & 91-08-7 ACGIH – TLV-TWA 0,005 ppm;</p>
<p>Appropriate engineering controls</p>
<p>Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.</p>
<p>Individual protection measures/personal protective equipment</p>
<p>Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.</p>

Section 9. Physical and chemical properties			
Appearance, physical state/colour	Clear liquid	Vapour pressure	Heavier than air.
Odour	Faint	Vapour density	Not available
Odour threshold	Not available	Relative density	1.12-1.19 @ 25 °C
pH	Not available	Solubility	Insoluble
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	136-138°C	Auto-ignition temperature	Not available
Flash point	23-27°C	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solids and gases)	Not available	VOC	< 350 g/l
Upper and lower flammability/explosive limits	Not available	Other	None known
Section 10. Stability and reactivity			
Reactivity			
Does not react under the recommended storage and handling conditions prescribed.			

Chemical stability	
Stable under the recommended storage and handling conditions prescribed.	
Possibility of hazardous reactions	
None	
Conditions to avoid (static discharge, shock or vibration)	
Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharge.	
Incompatible materials	
Oxidizing materials; etc.	
Hazardous decomposition products	
None known	
Section 11. Toxicological information	
Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	
May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes eye irritation. May be harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer.	
Symptoms related to the physical, chemical and toxicological characteristics	
Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing. Coughing.	
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	
Skin Sensitization – Yes, possible; Respiratory Sensitization – Yes, possible; Germ Cell Mutagenicity – No data available; Carcinogenicity – Yes, possible ingredient listed by IARC, ACGIH, NTP or OSHA Reproductive Toxicity – No data available; Specific Target Organ Toxicity — Single Exposure – No data available; Specific Target Organ Toxicity — Repeated Exposure – No data available; Aspiration Hazard – Yes, possible; Health Hazards Not Otherwise Classified – No data available.	
Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)	
CAS 98-56-6 Oral, rat LD ₅₀ 13000 mg/kg; CAS 1330-20-7 Oral, rat LD ₅₀ 4300 mg/kg; Dermal, rabbit LD ₅₀ 12100 mg/kg; CAS 100-41-4 Oral, rat LD ₅₀ 3500 mg/kg; Dermal, rabbit LD ₅₀ 15380 mg/kg; CAS 108-65-6 Oral, rat LD ₅₀ 8532 mg/kg; CAS 584-84-9 & 91-08-7 Oral, rat LD ₅₀ 4130 mg/kg; Inh., rat LC ₅₀ 350 mg/m ³ 4h; ATE not available in this document.	
Section 12. Ecological information	
Ecotoxicity (aquatic and terrestrial information)	
No data available for the product itself.	
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available
Section 13. Disposal considerations	
Information on safe handling for disposal/methods of disposal/contaminated packaging	
Dispose of contents/container into safe container in accordance with local, regional or national regulations.	
Section 14. Transport information	
UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations	
UN1263; PAINT; CLASS 3; PG III	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)	

UN1263; PAINT; CLASS 3; PG III	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)	
UN1263; PAINT; CLASS 3; PG III	
Special precautions (transport/conveyance)	May also be shipped as a LIMITED QUANTITY in accordance with TDG.
Environmental hazards (IMDG or other)	None
Bulk transport (usually more than 450 L in capacity)	Possible

Section 15. Regulatory information

Safety/health Canadian regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL
Safety/health/environmental outside regulations specifics	
None	

Section 16. Other information

Date of the latest revision of the safety data sheet	November 11, 2015 version 1 (by NSS ENTREPRISE INC.)
References	Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.
Abbreviations	
ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate
CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.