


**SAFETY DATA SHEET (SDS)**

Section 1. Identification		
<b>Product identifier</b>	MC Crystal VR-1800	
<b>Other means of identification</b>	None	
<b>Recommended use and restrictions on use</b>	Solvent	
<b>Initial supplier identifier</b>	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 : <a href="mailto:info@mc-crystal.com">info@mc-crystal.com</a> Website : <a href="http://mc-crystal.com">mc-crystal.com</a>	
<b>Emergency telephone number/restriction on use</b>	Canada – CANUTEC 24 hour number 613-996-6666	
Section 2. Hazard identification		
<b>Classification of hazardous product (name of the category or subcategory of the hazard class)</b>		
Flammable liquid (Category 2) Acute toxicity by ingestion (Category 3) Acute toxicity inhalation (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Aspiration hazard (Category 1) Specific target organ toxicity – single exposure (Category 3 & 1), Central nervous system & Organs		
<b>Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)</b>		
		
Danger H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H370 Causes damage to organs. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 Ground and bound container and receiving equipment. P241 Use explosion-proof equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands/nails/face thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear gloves/protective clothing/eye protection/face protection. P301 + P310 IF SWALLOWED: Immediately call a doctor. P310 Rinse mouth. P331 DO NOT INDUCE VOMITING. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P302 + P352 IF ON SKIN: wash with plenty of water. P332 + P313 IF SKIN irritation occurs: Get medical attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a doctor if you feel unwell. P308 + P311 IF exposed or concerned: Call a 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 attention. P370 + P378 In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish. P403 + P233 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.		
<b>Other hazards known</b>	None	
Section 3. Composition/information on ingredients		
Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Toluene	108-88-3	40-60 %
Xylene	1330-20-7	5-15 %
Methanol	67-56-1	10-25 %
Methyl ethyl ketone (MEK)	78-93-3	15-30 %

Ethyl acetate	141-78-6	15-30 %
Isopropanol	67-63-0	10-25 %

<b>Section 4. First-aid measures</b>	
<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. IF exposed or concerned: Call a doctor.
<b>Ingestion</b>	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.
<b>Skin contact</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (15-20 minutes).
<b>Eye contact</b>	IF IN EYES, Rinse cautiously with water for several minutes (15-20). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
<b>Most important symptoms and effects (acute or delayed)</b>	Toxic if swallowed. Harmful if inhaled.
<b>Indication of immediate medical attention/special treatment</b>	In all cases, call a doctor. Do not forget this document.
<b>Section 5. Fire-fighting measures</b>	
<b>Specific hazards of the hazardous product (hazardous combustion products)</b>	
Carbon oxides and other irritant/toxic gases and fumes.	
<b>Suitable and unsuitable extinguishing media</b>	
In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish.	
<b>Special protective equipment and precautions for fire-fighters</b>	
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.	
<b>Section 6. Accidental release measures</b>	
<b>Personal precautions, protective equipment and emergency procedures</b>	
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).	
<b>Methods and materials for containment and cleaning up</b>	
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.	
<b>Section 7. Handling and storage</b>	
<b>Precautions for safe handling</b>	

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bound container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Wear gloves/protective clothing/eye protection/face protection.  
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. Do not breathe 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.

**Conditions for safe storage, including any incompatibilities**

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.

**Section 8. Exposure controls/Personal protection**

**Control parameters (biological limit values or exposure limit values and source of those values)**

Exposure limits: CAS 108-88-3 – ACGIH – TLV-TWA 20 ppm & PEL-TWA 200 ppm (ceiling 300 ppm); CAS 1330-20-7 ACGIH – TLV-TWA 100 ppm (STEL 150 ppm) & PEL-TWA 100 ppm; CAS 67-56-1 – ACGIH – TLV-TWA 200 ppm & TLV-STEL 250 ppm & PEL-TWA 200 ppm; CAS 78-93-3 ACGIH – TLV-TWA 200 ppm (STEL 300 ppm) & PEL-TWA 200 ppm; CAS 141-78-6 ACGIH – TLV-TWA 400 ppm & PEL-TWA 400 ppm; CAS 67-63-0 – ACGIH – TLV-TWA 200 ppm & TLV-STEL 400 ppm & PEL-TWA 400 ppm.

**Appropriate engineering controls**

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.

**Individual protection measures/personal protective equipment**

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.

**Section 9. Physical and chemical properties**

<b>Appearance, physical state/colour</b>	Clear liquid	<b>Vapour pressure</b>	Not available
<b>Odour</b>	Alcohol	<b>Vapour density</b>	Heavier than air
<b>Odour threshold</b>	Not available	<b>Relative density</b>	0.845
<b>pH</b>	Not available	<b>Solubility</b>	Soluble
<b>Melting/freezing point</b>	Not available	<b>Partition coefficient - n-octanol/water</b>	Not available
<b>Initial boiling point/range</b>	> 64°C	<b>Auto-ignition temperature</b>	Not available
<b>Flash point</b>	-4.4°C	<b>Decomposition temperature</b>	Not available
<b>Evaporation rate</b>	Not available	<b>Viscosity</b>	Not available
<b>Flammability (solids and gases)</b>	Not available	<b>VOC</b>	519,9 g/l
<b>Upper and lower flammability/explosive limits</b>	Not available	<b>Other</b>	None known

**Section 10. Stability and reactivity**

**Reactivity**

Does not react under the recommended storage and handling conditions prescribed.

<b>Chemical stability</b>	
Stable under the recommended storage and handling conditions prescribed.	
<b>Possibility of hazardous reactions</b>	
Accumulation of flammable/explosive vapours.	
<b>Conditions to avoid (static discharge, shock or vibration)</b>	
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges.	
<b>Incompatible materials</b>	
Oxidizing materials; acids; etc.	
<b>Hazardous decomposition products</b>	
None known	
<b>Section 11. Toxicological information</b>	
<b>Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)</b>	
Toxic if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. Causes damage to organs.	
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	
Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing; Respiratory tract irritation, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.	
<b>Delayed and immediate effects (chronic effects from short-term and long-term exposure)</b>	
Skin Sensitization – No data available; Respiratory Sensitization – No data available; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA Reproductive Toxicity – No data available; Specific Target Organ Toxicity — Single Exposure – Central nervous system & lungs, liver and kidneys; Specific Target Organ Toxicity — Repeated Exposure – No data available; Aspiration Hazard – Possible; Health Hazards Not Otherwise Classified – No data available.	
<b>Numerical measures of toxicity (ATE; LD<sub>50</sub> &amp; LC<sub>50</sub>)</b>	
CAS 108-88-3 LD <sub>50</sub> Oral - Rat - 5580 mg/kg; LC <sub>50</sub> Inhalation - Rat - 4 h – 8000 ppm; LD <sub>50</sub> Dermal - Rabbit – 12125 mg/kg; CAS 1330-20-7 Oral, rat LD <sub>50</sub> 4300 mg/kg; Dermal, rabbit LD <sub>50</sub> 12100 mg/kg; CAS 67-56-1 LD <sub>50</sub> Oral - Rat - 1187 mg/kg; LC <sub>50</sub> Inhalation - Rat - 4 h – 128 mg/l; LD <sub>50</sub> Dermal - Rabbit - 17100 mg/kg; CAS 78-93-3 LD <sub>50</sub> Oral - Rat - 2740 mg/kg; LC <sub>50</sub> Inhalation - Rat - 4 h – 11300 ppm; CAS 141-78-6 LD <sub>50</sub> Oral - Rat - 5600 mg/kg; CAS 67-63-0 LD <sub>50</sub> Oral - Rat - 4720 mg/kg; LC <sub>50</sub> Inhalation - Rat - 4 h – 17000 ppm; LD <sub>50</sub> Dermal - Rabbit - 12890 mg/kg. ATE not available in this document.	
<b>Section 12. Ecological information</b>	
<b>Ecotoxicity (aquatic and terrestrial information)</b>	No data available for the product
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	No data available
<b>Section 13. Disposal considerations</b>	
<b>Information on safe handling for disposal/methods of disposal/contaminated packaging</b>	
Dispose of contents/container into safe container in accordance with local, regional or national regulations.	
<b>Section 14. Transport information</b>	
<b>UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations</b>	
UN1992; FLAMMABLE LIQUID, TOXIC, N.O.S. (Toluene, Methanol); CLASS 3(6.1); PG II	
<b>UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)</b>	

UN1992; FLAMMABLE LIQUID, TOXIC, N.O.S. (Toluene, Methanol); CLASS 3(6.1); PG II	
<b>UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)</b>	
UN1992; FLAMMABLE LIQUID, TOXIC, N.O.S. (Toluene, Methanol); CLASS 3(6.1); PG II	
<b>Special precautions (transport/conveyance)</b>	May also be shipped as a LIMITED QUANTITY in accordance with TDG.
<b>Environmental hazards (IMDG or other)</b>	None
<b>Bulk transport (usually more than 450 L in capacity)</b>	Possible

**Section 15. Regulatory information**

<b>Safety/health Canadian regulations specifics</b>	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).
<b>Environmental Canadian regulations specifics</b>	Refer to Section 3 for ingredient(s) of the DSL
<b>Safety/health/environmental outside regulations specifics</b>	
None	

**Section 16. Other information**

<b>Date of the latest revision of the safety data sheet</b>	January 22, 2016 version 1 (by NSS ENTREPRISE INC.)
<b>References</b>	Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.
<b>Abbreviations</b>	

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.