

Master Protective Coatings Inc.

## Product Description

MPC-160 is a 100% solid, two component epoxy coating designed for controlling moisture vapor emissions on new or deteriorated concrete floors. This coating is recommended to be applied as a primer in areas of high humidity or on wet concrete. When applied at a thickness of 18 mils, it exceeds ASTM F3010 product requirements for vapor permeance. This coating will withstand moisture vapor emission rates up to 25lbs./24hrs./1000 ft<sup>2</sup> when applied properly.

## Areas of application

- Industrial Use - Garages; Warehouses; Airports and hangars; Processing and manufacturing plants
- Commercial Use - Shopping malls and boutiques; Hotels; Offices; Showrooms; Restaurants; Hospitals; Schools; Community centers
- Residential Use – Entrances and hallways; basements; entertainment rooms; bathrooms; kitchens and living rooms; outdoors spaces and pool outlines

## Packaging and Recommended Thickness

MPC- 160 is offered in the following kit sizes:

- 3-gallon kit (3.78L x 2 resin (A) and 3.78L hardener (B))
- Bulk packaging also available upon request

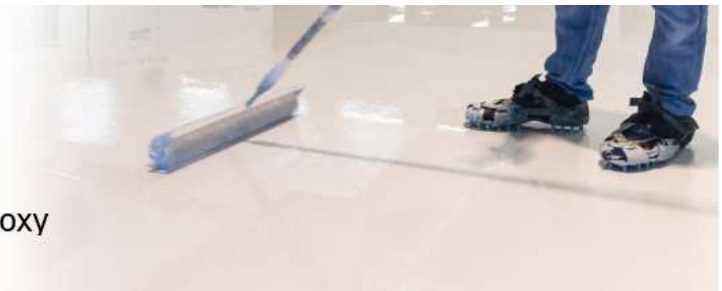
Recommended Film Thickness: 90-100 sq. ft. @ 18mils

## Surface Preparation

Remove dust, dirt, grease, oil and all other contaminants with proper cleaner/degreaser. Prepare the surface mechanically as per ICRI-CSP2 profile by diamond grinding to ensure removal of laitance, curing agents and sealers. The compressive strength of a newly poured concrete substrate must be at least 25 MPA (3635 psi) after 28 days cure and at least 1.5 MPA (218 psi) tensile strength. Be careful with condensation (within 10 degrees of the dew point). All cracks, holes and irregularities must be repaired with our epoxy crack filler prior to applying the coating.

Master Protective Coatings Inc.

Laval, Québec, H7L 4S2  
Phone : 1.800.324.5819  
E-mail : info@mpcoatings.ca



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## Mixing Instructions

The products must be conditioned between for 18°C (65°F) and 30°C (86°F) prior to application. Pre-mix each component separately for 2-3 minutes each. Open container with 2 parts of component A in it, then add the 1 part of component B to it (mixing ratio 2:1). Mix the components for at least 2-3 minutes using a low-speed drill (300-450 rpm) to reduce air entrapment and to obtain a homogeneous mixture.

## Product Application

1. Apply 1st coat of MPC-160 using a rubber squeegee and roll to obtain a uniform coating (using a fine quality 10mm roller).

Clean equipment with xylene. Once the product has hardened, it may only be removed mechanically.

## Product Restrictions

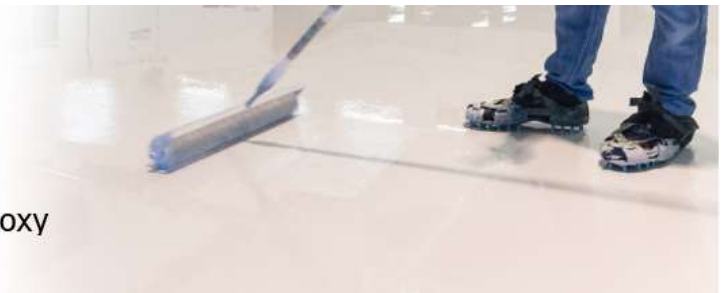
- Not recommended for application at temperatures below 5 °C / 41 °F or above 30 °C / 86 °F.
- Ambient humidity of the surroundings should not exceed 85% during application and during curing process.
- Substrate must be clean, sound and dry.
- Substrate temperature must be 3 °C (5.5 °F) above measured dew point.
- Humidity content of substrate must be < 6% at time of application.
- Do not apply on porous surfaces where a transfer of humidity may occur during the application.
- **This coating is not a replacement for a waterproofing membrane.**
- **This coating does not protect against areas of high hydrostatic pressure.**
- Freshly applied product must be protected against moisture, condensation and water for at least 48 hours.
- Surface discoloration of product may occur when exposed to UV rays.
- Exposure during the curing stage of the coating to the by-products of propane combustion may cause discoloration (amine blushing)

## Health and Safety

Components A and B contain toxic and corrosive ingredients. Consult the safety data sheet (S.D.S) for further information.

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## Technical Properties

Mix Ratio:	By volume: 2-parts resin (A) to 1-part hardener (B) By weight: 100g of resin (A) to 45g of hardener (B)
Viscosity:	Resin (A): 1200 – 1400 cps Hardener (B): 200 – 300 cps Mixed: 700 – 900 cps
Pot Life (145g):	30-45 minutes at room temperature

## Physical Properties

Solids by Weight:	100% (+/- 1%)
Shelf Life:	1 year in unopened containers
Vapor Permeance @18mil thickness	0.1 US perm, ASTM E96
MVER/RH @ 18 mil thickness	25lb./24hr./1000 ft <sup>2</sup> , ASTM F1869
Abrasion Resistance:	Taber abraser CS-17 calibrase wheel with 1000-gram total load and 1000 cycles = 10 mg loss
Flexural Strength:	5,500 psi, ASTM D638
Compressive Strength:	10 500 psi, ASTM D695
Tensile Strength:	6 500 psi, ASTM D638
Adhesion:	>300 psi, ASTM D4541 (concrete failure)
Hardness:	Shore D = 85-90
Application Temperature:	15°C-21°C with relative humidity below 85%
Drying Times:	21°C / 70°F @ 50% relative humidity (Cure times vary depending on temperature)  Pot life per 3-gallon kit: 20-25 minutes Re-coat or topcoat-8-12 hours Light foot traffic-12-24 hours Full cure (heavy traffic) - 7 days

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## Disclaimer

The information and recommendations contained in this technical data sheet are based on reliable test results according to MPC. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. MPC assumes no legal responsibility for the results obtained in such cases. MPC assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

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### Section 1. Identification

<b>Product identifier</b>	MPC-160A
<b>Other means of identification</b>	None
<b>Recommended use and restrictions on use</b>	Epoxy resin
<b>Initial manufacturer identifier</b>	Master Protective Coatings Inc. 8615 rue du Creusot St.-Leonard, Quebec H1P 2A8 1-800-324-5819
<b>Emergency telephone number/restriction on use</b>	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)**

- Acute toxicity oral (Category 4)
- Skin corrosion (Category 1)
- Serious eye damage (Category 1)
- Skin sensitization (Category 1)
- Reproductive toxicity (Category 2)
- Hazardous to the aquatic environment – Acute (Category 1)
- Hazardous to the aquatic environment – Chronic (Category 1)

**Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)**



Danger

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dusts or mists.
- P264 Wash hands/nails/face thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P312 Call a doctor if you feel unwell.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P363 Wash contaminated clothing before reuse. P332 + P313 IF SKIN irritation or rash occurs: Get medical attention.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a doctor.
- P308 + P313 IF exposed or concerned: Get medical attention.
- P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

**Other hazards known** None

### Section 3. Composition/information on ingredients



Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Reaction product - Bisphenol A (Epichlorohydrin)	25068-38-6	60-90
Alkyl (C12-C14) glycidyl ether	68609-97-2	10-30
P-Nonylphenol	84852-15-3	7-13

\* Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

#### Section 4. First-aid measures

<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately 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). Wash contaminated clothing before reuse.
<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>	Causes severe skin, respiratory or digestive tract burns and eye damage.
<b>Indication of immediate medical attention/special treatment</b>	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 surrounding products.

##### 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

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: None known

**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. We recommend wearing chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact during all handling operations. We recommend wearing protective chemical splash goggles/safety glasses or other 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>	Viscous liquid	<b>Vapour pressure</b>	Not available
<b>Odour</b> Characteristic		<b>Vapour density</b>	Not available
<b>Odour threshold</b> Not available		<b>Relative density</b>	1.09
<b>pH</b> Not available		<b>Solubility</b>	Not available
<b>Melting/freezing point</b> Not available		<b>Partition coefficient - n-</b>	Not available
		<b>octanol/water</b>	
<b>Initial boiling point/range</b> Not available		<b>Auto-ignition temperature</b>	Not available
<b>Flash point</b> Not available		<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>	Not available
<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.

**Chemical stability**

Stable under the recommended storage and handling conditions prescribed.

**Possibility of hazardous reactions**

None known

**Conditions to avoid (static discharge, shock or vibration)**

None known

**Incompatible materials**

Oxidizing materials; Acids; etc.

**Hazardous decomposition products**

None known

**Section 11. Toxicological information**

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)**



Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

**Symptoms related to the physical, chemical and toxicological characteristics**

Skin burn, redness, stinging, pain; Eye burn, redness, tearing; Digestive tract burn; Respiratory tract burn, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.

**Delayed and immediate effects (chronic effects from short-term and long-term exposure)**

Skin Sensitization – Possible;  
 Respiratory Sensitization – No data available;  
 Germ Cell Mutagenicity – No data available;  
 Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA;  
 Reproductive Toxicity – Possible;  
 Specific Target Organ Toxicity — Single Exposure – No data available;  
 Specific Target Organ Toxicity — Repeated Exposure – No data available;  
 Aspiration Hazard – No data available;  
 Health Hazards Not Otherwise Classified – No data available.

**Numerical measures of toxicity (ATE; LD<sub>50</sub> & LC<sub>50</sub>)**

CAS 84852-15-3 LD<sub>50</sub> Oral - Rat – 1246 mg/kg & LD<sub>50</sub> Dermal - Rabbit – 2040 mg/kg;  
 ATE not available in this document.

**Section 12. Ecological information**

**Ecotoxicity (aquatic and terrestrial information)** No data available for this product

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Other adverse effects** Toxic to aquatic life with long lasting effects.

**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**

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (P-Nonylphenol); CLASS 8; PG III

**UN number; Proper shipping name; Class(es); Packing group (PG) of the 49 CFR (USA)**

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (P-Nonylphenol); CLASS 8; PG III

**UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)**

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (P-Nonylphenol); CLASS 8; PG III

**UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)**

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (P-Nonylphenol); CLASS 8; PG III

**Special precautions (transport/conveyance)**

May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**Environmental hazards (IMDG or other)** Marine Pollutant

**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**

United States OSHA information: This product is regulated according to OSHA (29 CFR).

United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.

United States TCSA information: Refer to the ingredients listed in Section 3.

National Fire Protection Association (NFPA):

HEALTH: 3 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3.

HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Proposition 65: This product does not contain a chemical known to the State of California to cause cancer or other reproductive harm.

**Section 16. Other information**

**Date of the latest revision of the safety data sheet**

March 11, 2020 version 1 (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.



**Section 1. Identification**

**Product identifier** MPC-160B  
**Other means of identification** None  
**Recommended use and restrictions on use** Epoxy Hardener  
**Initial manufacturer identifier** Master Protective Coatings Inc.  
 8615 rue du Creusot  
 St.-Leonard, Quebec H1P 2A8  
 1-800-324-5819  
**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)**

Skin irritation (Category 2)  
 Sensitization – Skin (Category 1)  
 Respiratory sensitization (Category 1)  
 Eye irritation (Category 2A)

**Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)**



**Danger**  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 P260 Do not breathe 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 gloves/protective clothing/eye protection/face protection.  
 P284 Wear respiratory protection.  
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342 + P311 If experiencing respiratory symptoms: Call a doctor.  
 P302+P352 IF ON SKIN, Wash with plenty of water for several minutes.  
 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.  
 P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

**Other hazards known** None

**Section 3. Composition/information on ingredients**

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)*
Ethylene Diamine	107-15-3	< 5

\* Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

**Section 4. First-aid measures**





<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If experiencing respiratory symptoms: 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, Wash with plenty of water for several minutes. (15-20) IF SKIN irritation or rash occurs: Get medical attention.
<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>	Causes serious eye irritation. Causes skin irritation.
<b>Indication of immediate medical attention/special treatment</b>	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 surrounding products.

**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**

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 107-15-3 ACGIH – TLV-TWA 10 ppm & PEL-TWA 10 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. We recommend wearing chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact during all handling operations. We recommend wearing protective chemical splash goggles/safety glasses or other 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>	Red liquid	<b>Vapour pressure</b>	Not available
<b>Odour</b>	Characteristic	<b>Vapour density</b>	Not available
<b>Odour threshold</b>	Not available	<b>Relative density</b>	0.987
<b>pH</b>	10.5	<b>Solubility</b>	Not available
<b>Melting/freezing point</b>	Not available	<b>Partition coefficient - n-octanol/water</b>	Not available
<b>Initial boiling point/range</b>	Not available	<b>Auto-ignition temperature</b>	Not available
<b>Flash point</b>	> 93°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>	Not available
<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.

**Chemical stability**

Stable under the recommended storage and handling conditions prescribed.

**Possibility of hazardous reactions**

None known

**Conditions to avoid (static discharge, shock or vibration)**

None known

**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)**

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Symptoms related to the physical, chemical and toxicological characteristics**

Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing; Respiratory tract irritation, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.

**Delayed and immediate effects (chronic effects from short-term and long-term exposure)**

Skin Sensitization – Possible;  
 Respiratory Sensitization – Possible;  
 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 – No data available;  
 Specific Target Organ Toxicity — Repeated Exposure – No data available;



Aspiration Hazard – No data available;  
Health Hazards Not Otherwise Classified – No data available.

**Numerical measures of toxicity (ATE; LD<sub>50</sub> & LC<sub>50</sub>)**

None known  
ATE not available in this document.

**Section 12. Ecological information**

**Ecotoxicity (aquatic and terrestrial information)** No data available for this product

**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**

Not regulated

**UN number; Proper shipping name; Class(es); Packing group (PG) of the 49 CFR (USA)**

Not regulated

**UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)**

Not regulated

**UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)**

Not regulated

**Special precautions (transport/conveyance)** None

**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**

United States OSHA information: This product is regulated according to OSHA (29 CFR).

United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.

United States TCSA information: Refer to the ingredients listed in Section 3.

National Fire Protection Association (NFPA):

HEALTH: 2 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3.

HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Proposition 65: This product does not contain a chemical known to the State of California to cause cancer or other reproductive harm.

**Section 16. Other information**

**Date of the latest revision of the safety data sheet** March 11, 2020 version 1 (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.