



Master Protective Coatings Inc.

Product Description

MPC-301 is a two-component, high-solids, aliphatic polyurethane coating designed as a UV-stable, chemical-resistant topcoat. It gives a satin appearance and demonstrates excellent physical properties and resistance to industrial traffic. It can be applied over an epoxy primer or used to coat an existing epoxy or urethane coating. This product is also ecological and contains no VOCs.

Principal applications

- UV stable topcoats
- Industrial Use - Garages; Warehouses; Airports and hangars; Processing and manufacturing plants. Maintenance facilities

Packaging and Recommended Thickness

MPC- 301 is offered in the following kit sizes:

- 1-gallon kit (3.78L) / including anti-slip abrasive
Mix Ratio by volume 4A:1B
- Bulk packaging also available upon request

Product Coverage:

500 sq. ft. / 3.78L (1 US gal.) @ 3.2 mils dft (81 microns)

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).

Mixing Instructions

Pre-mix each component separately for 2-3 minutes each. Open container of component A then add component B to it (mixing ratio 4:1 by volume). To obtain a satin finish, add bag of abrasive grit to the mixture. 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.

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Product Application

1. Apply 1st coat of MPC-301 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 10°C / 50°F or above 30°C / 86°F.
- Ambient humidity of the surroundings should not exceed 85% during application and during curing process.
- Substrate temperature must be 3°C (5.5°F) above measured dew point.
- Humidity content of substrate must be < 4% at time of application.
- Do not apply on porous surfaces where a transfer of humidity may occur during the application.
- Applying this product on a substrate without a moisture barrier may risk delamination due to hydrostatic pressure.
- Freshly applied product must be protected against moisture, condensation and water for at least 48 hours.

Health and Safety

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

Technical Properties

Mix Ratio:	By volume: 4-parts hardener (A) to 1-part resin (B) By weight: 100g of hardener (A) to 20g of resin (B)
Viscosity:	Mixed: 300 – 400 cps
Pot Life (120g):	120 minutes

Physical Properties

Shelf Life:	1 year in unopened containers
Working Times:	30 minutes
Drying Times:	Light foot traffic - 24 hours (24C and 50% relative humidity) Full cure and full chemical resistance (heavy traffic) - 7 days
Abrasion Resistance (CS-17/1000cycles/1000g)	8.8, ASTM D4060

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Static coefficient of friction	0.60, ASTM D4060
Traction resistance	6250 (43.092), ASTM D2370
Elongation	7, ASTM D2370

Chemical Resistance

Products	1 day	7 day
Hydrochloric acid, 10%	Excellent	Excellent
Hydrochloric acid, 30%	Excellent	Excellent
Nitric acid, 10%	Good	Weak
Phosphoric acid, 50%	Good	Good
Sulfuric acid, 37% (battery acid)	Excellent	Good
Acetic acid, 10%	Excellent	Excellent
Citric acid, 10%	Excellent	Excellent
Oleic acid	Excellent	Excellent
Ammonium hydroxide	Excellent	Excellent
Sodium hydroxide	Excellent	Excellent
Ethylene glycol (antifreeze)	Excellent	Excellent
Isopropyl alcohol	Good	Good
Methanol	Good	Weak
Aircraft fuel	Excellent	Excellent
Gasoline	Excellent	Excellent
Mineral spirits	Excellent	Excellent
Xylene	Excellent	Excellent
Mineral oil	Excellent	Excellent
Motor oil	Excellent	Excellent
Skydrol	Excellent	Excellent

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.

Master Protective Coatings Inc.



Section 1. Identification

Product identifier MPC-301 A
Other means of identification None
Recommended use and restrictions on use Urethane 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)
 Eye irritation (category 2A)
 Skin sensitization (category 1)
 Acute toxicity inhalation (Category 4)
 Respiratory sensitization (category 1)
 Specific target organ toxicity – Single exposure (Category 3)

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



Danger
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H332 Harmful if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands/nails/face thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. 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. 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. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a doctor. P342 + P311 If experiencing respiratory symptoms: 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. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. 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 (%)*
Homopolymer of HDI	28182-81-2	60-100
Hexamethylene diisocyanate	822-06-0	< 0.5
Propylene carbonate	108-32-5	< 10
Mixture Diisobutyl adipate & Diisobutyl glutarate & Diisobutyl succinate	141-04-8	< 10
	71195-64-7	
	925-06-4	



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

Section 4. First-aid measures

Inhalation	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.
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, Wash with plenty of water for several minutes. (15-20) IF SKIN irritation or rash occurs: Get medical attention.
Eye contact	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.
Most important symptoms and effects (acute or delayed)	Causes serious eye irritation. Causes skin irritation.
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 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 822-06-0 ACGIH – TLV-TWA 0.005 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

Appearance, physical state/colour	Liquid	Vapour pressure	Not available
Odour	Characteristic	Vapour density	Not available
Odour threshold	Not available	Relative density	1.142
pH	Not available	Solubility	Not available
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	Not available	Auto-ignition temperature	Not available
Flash point	> 93°C	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solids and gases)	Not available	VOC	Not available
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 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. Causes serious eye irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

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 – Possible;
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; LD₅₀ & LC₅₀)

CAS 28182-81-2 LC₅₀ Inhalation - Rat - 4 h – 400-425 mg/m³; CAS 822-06-0 LC₅₀ Inhalation - Rat - 4 h – 310-350 mg/m³; CAS 108-32-7 LD₅₀ Oral - Rat - 33520 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 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 April 14, 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-301 B
Other means of identification	None
Recommended use and restrictions on use	Urethane Resin
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 corrosion (Category 1)
- Serious eye damage (Category 1)
- Skin sensitization (Category 1)
- Hazardous to the aquatic environment – Chronic (Category 3)

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



Danger

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.
- P260 Do not breathe dusts or mists.
- P264 Wash hands/nails/face thoroughly after handling.
- 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.
- 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 (%)
1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5- [(2-METHYL PROPYLIDENE) AMINO] CYCLOHEXANEMETHYLAMINE	54914-37-3	60-100
3-OXAZOLIDINEETHANOL, 2-(1-METHYLETHYL)-, CARBONATE (2:1) (ESTER)	145899-78-1	10-30
Mixture Diisobutyl adipate & Diisobutyl glutarate & Diisobutyl succinate	141-04-8 71195-64-7 925-06-4	10-30

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



Section 4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately 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): Take off immediately all contaminated clothing. Rinse skin with water (15-20 minutes). Wash contaminated clothing before reuse.
Eye contact	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.
Most important symptoms and effects (acute or delayed)	Causes severe skin, respiratory or digestive tract burns and eye damage.
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 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;

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

Appearance, physical state/colour	Viscous liquid	Vapour pressure	Not available
Odour Characteristic		Vapour density	Not available
Odour threshold Not available		Relative density	0.906
pH Not available		Solubility	Not available
Melting/freezing point Not available		Partition coefficient - n-octanol/water	Not available
Initial boiling point/range Not available		Auto-ignition temperature	Not available
Flash point > 93°C		Decomposition temperature	Not available
Evaporation rate Not available		Viscosity	Not available
Flammability (solids and gases) Not available		VOC	Not available
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 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)

Causes severe skin burns and eye damage. May cause an allergic skin reaction.

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 – 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; LD₅₀ & LC₅₀)

None;
 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 Harmful 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. (1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5- [(2-METHYLPROPYLIDENE) AMINO] CYCLOHEXANEMETHYLAMINE); 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. (1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5- [(2-METHYLPROPYLIDENE) AMINO] CYCLOHEXANEMETHYLAMINE); 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. (1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5- [(2-METHYLPROPYLIDENE) AMINO] CYCLOHEXANEMETHYLAMINE); 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. (1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5- [(2-METHYLPROPYLIDENE) AMINO] CYCLOHEXANEMETHYLAMINE); 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) None known

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

April 14, 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-301C
Other means of identification	None
Recommended use and restrictions on use	Anti-slip agent
Initial supplier 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)	NOT HAZARDOUS
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)	None
Other hazards known	None

Section 3. Composition/information on ingredients

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Aluminum oxide	1344-28-1	99-100

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

Section 4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately 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): Take off immediately all contaminated clothing. Rinse skin with water (5-10 minutes). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (5-10). 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)	May cause mild transient respiratory tract, eye and skin irritations.
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 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 1344-28-1 ACGIH – TLV-TWA 1 mg/m³ & PEL-TWA 5 mg/m³ (respirable particles) & 15 mg/m³ (total dust);

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 respirator 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

Appearance, physical state/colour	White solid/granule	Vapour pressure	Not available
Odour	Odourless	Vapour density	Not available
Odour threshold	Not available	Relative density	3.965 g/cm ³
pH	Not available	Solubility	Insoluble
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	Not available	Auto-ignition temperature	Not available
Flash point	Not available	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solids and gases)	Not available	VOC	Not available
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 known

Conditions to avoid (static discharge, shock or vibration)

None known

Incompatible materials

None known

Hazardous decomposition products

None known

Section 11. Toxicological information

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

May cause mild transient respiratory tract, eye and skin irritations.

Symptoms related to the physical, chemical and toxicological characteristics

Skin irritation, redness, stinging; Eye irritation, redness; Respiratory tract irritation, coughing, etc...

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

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 – 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; LD₅₀ & LC₅₀)

None;

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 known

Environmental hazards (IMDG or other) None known

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: 1 FLAMMABILITY: 0 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 April 14, 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
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