SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier:	ECU-4000 (B)
Other means of identification:	None
Recommended use:	Resin
Manufactured by:	Elite Coatings Canada Inc. 9805 Horton Road SW Calgary, AB T2V 2X5 Canada
Email:	info@elitecoatings.ca
Prepared by:	The Health, Safety and Environmental Department of Elite Coatings Canada Inc.
Telephone number of preparer:	+1 (403) 397 6355
Emergency telephone number:	24-Hour Emergency Telephone Number Canada (CANUTEC): +1 (613) 996-6666

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification of hazardous product

- Acute Toxicity, Inhalation (Category 4)
- Aspiration Hazard (Category 1)
- Serious eye damage/irritation (Category 1)
- Skin Corrosion/irritation (Category 1)
- Skin Sensitization (Category 1)
- Reproductive toxicity (Category 2)
- Carcinogenicity (Category 2)
- Specific target organ toxicity, single exposure; Narcotics effects (Category 3)
- Specific target organ toxicity, repeated exposure (Category 2)
- Hazardous to the aquatic environment acute (Category 3)
- Hazardous to the aquatic environment chronic (Category 3)

GHS Label Elements Hazard Pictograms/symbols







Signal Word: DANGER





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Hazard and Precautionary Statements:

- H332 Harmful if inhaled
- **H304** May be fatal if swallowed and enters airways
- **H314** Causes severe skin burns and eye damage
- **H317** May cause an allergic skin reaction
- H351 Suspected of causing cancer
- **H336** May cause drowsiness or dizziness
- P373 May cause damage to organs through prolonged or repeated exposure
- **P361** Suspected of damaging fertility or the unborn child
- **P412** Harmful 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. P314 Get medical advice/attention if you feel unwell. P280 Wear protective gloves/protective clothing/eye protection/face protection. P308 + P313 IF exposed or concerned: Get medical advice/attention. P272 Contaminated work clothing should not be allowed out of the workplace. P271 Use only outdoors or in a well-ventilated area. P264 Wash with plenty of water and soap thoroughly after handling. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower]. P333 +P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician. P301 + P330 IF SWALLOWED: Rinse mouth. P331 Do NOT induce vomiting. P362 + P364 Take off contaminated clothing and wash before reuse. P273 Avoid release to the environment. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other Hazards Known: None known GHS Special Labeling: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Concentration (%)
1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	54914-37-3	55 - 75 %
N-butyl-2-(1-ethylpentyl)-1,3-oxazolidine	165101-57- 5	10 – 20 %
4-methy-1,3-dioxolan-2-one	108-32-7	10 - 20 %
Distillates (petroleum), hydrotreated light	64742-47-8	1-5%
xylene	1330-20-7	0 – 1%
Ethyl benzene	100-41-4	0 - 1%





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Toluene	108-88-3	0 – 1%
octamethylcyclotetrasiloxane	556-67-2	0 – 1%

SECTION 4. FIRST AID MEASURES

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Skin Contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Most important symptoms and effects (acute and delayed)

May cause an allergic skin reaction. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing, shortness of breath, headaches, and nausea. High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination and fatigue). May irritate the digestive tract and cause same symptoms as inhalation; high dosages may result in unconsciousness.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General Information

If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure the medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media: In case of fire: Water fog. Alcohol-resistant foam. Dry chemical powder. Carbon dioxide (CO₂)
- Unsuitable extinguishing media: No information available.

Specific hazards arising from the hazardous product: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire-fighting: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental Precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Do not get this material in contact with eyes. DO not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters (biological limit values or exposure limit values and source of those values Exposure limits:

CAS#	Value type (Form of exposure)	Control parameters / permissible concentrations	Basis
CAS 54914-37-3	No exposure limit value known.		
CAS 165101-57-5	No exposure limit value known.		



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CAS 108-32-7	No exposure limit value known.		
CAS 64742-47-8	TWA TWA TWA TWA TWA (mist) TWA (mist)	500 ppm /2000 mg/m ₃ 200 mg/m3 (total hydrocarbon vapor) 400 ppm /1600 mg/m ₃ 5 mg/m ₃ 5 mg/m ₃	OSHA Z-1 ACGIH OSHA PO OSHA Z-1 OSHA PO
CAS 1330-20-7	TWA STEL TWA TWA STEL	100 ppm /435 mg/m₃ 150 ppm /655 mg/m₃ 100 ppm /435 mg/m₃ 100 ppm 100 ppm	OSHA Z-1 OSHA PO OSHA PO ACGIH ACGIH
CAS 100-41-4	TWA TWA STEL	100 ppm /435 mg/m₃ 100 ppm /435 mg/m₃ 125 ppm /545 mg/m₃	OSHA Z-1 OSHA PO OSHA PO
CAS 108-88-3	TWA TWA CEIL Peak TWA STEL	20 ppm 200 ppm 300 ppm 500 ppm 100 ppm /375 mg/m₃ 150 ppm /560 mg/m₃	ACGIH OSHA Z-2 OSHA Z-2 OSHA Z-2 OSHA PO OSHA PO
CAS 556-67-2	TWA	10 ppm	US WEEL

Engineering Controls

Provide good local exhaust ventilation to control vapour/mist. Eye wash facilities and emergency showers must be available when handling this product.

Personal Protective Equipment

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Wear appropriate chemical resistant protective gloves. Wear tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists. Wear appropriate protective clothing. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eyewash fountains and safety showers are recommended in the work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State/ Appearance/ Color:	Transparent liquid, Clear – Pale yellow	Vapour Pressure:	Not available
Odour:	Slight amine odour	Vapour Density:	Not available





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Odour threshold:	Not available	Relative Density:	0.91 (g/ml)
pH:	Not available	Solubility:	Reacts with water
Melting/freezing point:	Not available	Partition coefficient-n-octanol/water:	Not available
Initial boiling point/range:	240-243°C	Auto-ignition temperature:	>200°C
Flash point (closed cup):	85 °C	Decomposition temperature:	Not available
Evaporation rate:	Not available	Viscosity:	100 - 200 cps
Flammability (solids and gases):	Not available	voc:	Not available
Upper and lower flammability/explosive limits	21 vol. % @ 200°C 4.7 vol. % @ 200°C	Other:	None known

SECTION 10. STABILITY AND REACTIVITY

Reactivity: This is not a stable product and it reacts with moist air. **Chemical Stability:** This product is stable under normal conditions. **Possibility of hazardous reactions:** None under normal processing.

Conditions to Avoid: Extreme heat, sparks and open flames. Incompatible materials, oxidizers and oxidizing conditions.

Moisture before application.

Incompatible materials: Oxidizing agents. Strong acids and alkalis. Water.

Hazardous decomposition products: Oxides of carbon (CO, CO2). Oxides of nitrogen (NOx), Isophorone diamine. Isobutyraldehyde.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure (inhalation, ingestion, skin and eye contact):

Inhalation: Harmful if inhaled. Aspiration: May be fatal if swallowed and enters airways. Skin and eye contact: May cause an allergic skin reaction. Causes severe skin burns. Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics:

Contains ingredients which are extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes, and skin. Burning pain and severe corrosive skin damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing, shortness of breath, headaches, and nausea. High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination and fatigue). May irritate the digestive tract and cause same symptoms as inhalation; high dosages may result in unconsciousness.

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

- **Skin Sensitization** Sensitization after skin contact possible;
- Respiratory Sensitization No data available;





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- Germ Cell Mutagenicity No data available;
- Carcinogenicity Ethylbenzene (CAS 100-41-4) is an IARC group 2B carcinogen based on animal studies;
- **Reproductive Toxicity** Suspected of damaging fertility or the unborn child;
- Specific Target Organ Toxicity Single Exposure May cause drowsiness or dizziness;
- Specific Target Organ Toxicity Repeated Exposure May cause damage to organs through prolonged or repeated exposure;
- Aspiration Hazard Possible;
- Health Hazards Not Otherwise Classified No data available.

Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀):

LD ₅₀ , Oral – Rat – 4150 mg/kg LD ₅₀ , Dermal- Rat – >5000 mg/kg
No data available
LD ₅₀ , Oral – Rat – 29000 mg/kg LD ₅₀ , Dermal- Rabbit – >3000 mg/kg
LD ₅₀ , Dermal- Rabbit – >3160 mg/kg
LD_{50} , Oral – Rat – 3523 mg/kg LC_{50} , Inhalation(4h) – Rat – 5000 ppm LD_{50} , Dermal- Rabbit – 1700 mg/kg
LD ₅₀ , Oral – Rat – 3500 mg/kg LD ₅₀ , Dermal- Rabbit – 5510 mg/kg
LD ₅₀ , Oral – Rat – 2600 mg/kg
No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial information):

Harmful to aquatic life with long lasting effects.

Product	Species	Result
CAS 54914-37-3	LC₅₀ Danio rerio (fish) EC₅₀ Daphnia magna (water flea) EC₅₀ Desmodesmus Subspicatus (algae)	>100 mg/l – 96 h 22.2 mg/l – 48 h 73.6 mg/l – 72 h
CAS 165101-57-5	No data available	
CAS 108-32-7	LC ₅₀ Leuciscus idus (fish) EC ₅₀ Daphnia magna (water flea) EC ₅₀ Desmodesmus Subspicatus (algae) EC ₅₀ (microtox)	5300 mg/l – 96 h >500 mg/l – 48 h >500 mg/l – 72 h >10000 mg/l – 17 h





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CAS 64742-47-8	No data available	
CAS 1330-20-7	No data available	
CAS 100-41-4	No data available	
CAS 108-88-3	No data available	
CAS 556-67-2	No data available	

Persistence and degradability: Not readily biodegradable.

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: UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (blocked diamine); CLASS 8; PG III

Special Precautions (transport/conveyance):

May also be shipped as a LIMITED QUANTITY in accordance with TDG (quantities of 5L or less per individual packaging)

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

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (blocked diamine); 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. (blocked diamine); CLASS 8; PG III

Environmental hazards (IMDG or other): None known

Bulk transport (usually more than 450L in capacity): Possible.

SECTION 15. REGULATORY INFORMATION

Safety/health Canadian regulations specifics:

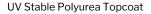
Refer to section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Environmental Canadian regulations specifics:

Refer to section 3 for ingredient(s) of the DSL.









Safety/health/environmental outside regulations specifics:

None

SECTION 16. OTHER INFORMATION

Disclaimer:

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

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END OF S.D.S.*