

**SAFETY DATA SHEET**

**1. PRODUCTS AND COMPANY IDENTIFICATION**

**Product Name:** COLORCOAT AL ESTER (250 VOC) (IN COLORS)

**Product Use:** Polyurethane Construction Coating

Manufacturer	Canadian Supplier	Medical Emergency
TUFFLEX POLYMERS 10880 Poplar Avenue Fontana, CA 92337 Web: <a href="http://www.tufflexpolymers.com">www.tufflexpolymers.com</a> Fax Number: (909) 823-6309	FLEXSTONE COATINGS INC 1230 W 75 <sup>th</sup> Avenue Vancouver, BC, V6P3G3 Web: <a href="http://www.flexstones.ca">www.flexstones.ca</a> Fax: (604) 222-1818	CHEMTREC (USA): (800) 424-9300 CHEMTREC (International): (703) 527-3887 SDS Assistance: (909) 349-2016 Technical Assistance: (909) 349-2016 Customer Service: (888) TUFFLEX

**2. COMPONENT INFORMATION Classification**

**(GHS-US)**

Flam. Liq. 3	H226
Acute Tox. Oral 4	H302
Acute Tox. Inhal. 2	H330
Acute Tox. 3 (Inhalation:dust,mist)	H331
STOT SE 3	H336
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Muta. 1B	H340
Carc. 1A	H350
Repr. 1B	H360
Tox. To Rep. 2	H361
Asp. Tox. 1	H304
Aquatic Acute 3	H402
Aquatic Chronic 2	H411
Aquatic Chronic 3	H412

**Label Elements**

**GHS-US Labeling**

**Hazard Pictograms (GHS-US)**



**Signal Word (GHS-US)**

: Danger



**Hazard Statements (GHSUS)**

- : H226 - Flammable liquid and vapor
- H302 - Harmful if swallowed
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- H330 - Fatal if inhaled
- H331 - Toxic if inhaled
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H336 - May cause drowsiness or dizziness
- H340 - May cause genetic defects
- H350 - May cause cancer
- H360 - May damage fertility or the unborn child
- H361 - Suspected of damaging fertility or the unborn child
- H402 - Harmful to aquatic life
- H411 - Toxic to aquatic life with long lasting effects
- H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements  
(GHS-US)**

- : P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical, lighting, ventilating equipment
- P242 - Use only non-sparking tools
- P243 - Take precautionary measures against static discharge
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray
- P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P271 - Use only outdoors or in a well-ventilated area
- P280 - Wear eye protection, face protection, protective clothing, protective gloves
- P281 - Use personal protective equipment as required.
- P284 - Wear respiratory protection
- P285 - In case of inadequate ventilation wear respiratory protection.
- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
- P304+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- P310 - Immediately call a POISON CENTER or doctor/physician
- P311 - Call a POISON CENTER or doctor/physician.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P320 - Specific treatment is urgent (see supplemental instructions on the administration of antidotes on this label)
- P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label).
- P330 - Rinse mouth
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.
- P370+P378 - In case of fire: Use appropriate media for extinction
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed
- P403 + P235 - Store in a well-ventilated place. Keep cool.
- P403+233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up
- P501 - Dispose of contents/container according to local, regional, national, and international regulations

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt. % Range	Classification (GHS-US)
1-Methoxy-2-Propyl Acetate	108-65-6	2 - 5	Flam. Liq. 3, H226 Repr. 1B, H360 Aquatic Acute 3, H402
Aromatic Hydrocarbon Solvent	64742-95-6	18 - 22	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Muta. 1B, H340 Carc. 1A, H350 Tox. To Rep. 2, H361 Aquatic Chronic 2, H411
Aliphatic Diisocyanate	4098-71-9	< 0.5	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation:dust,mist), H330
Aliphatic Urethane Prepolymer		51 - 55	
Crystalline Silica (Quartz)	14808-60-7	< 1	Carc. 1A, H350 STOT SE 3, H335
			STOT RE 1, H372
Titanium Dioxide	13463-67-7	7 - 10	Skin Irrit. 2, H315

\* Information concerning non-hazardous ingredients is considered a trade secret

### 4. FIRST AID MEASURES

**Emergency and Hazards Overview:** Combustible, viscous, pigmented liquid with a solvent odor. Causes skin irritation. Causes eye irritation. Harmful if swallowed or inhaled. Vapors are heavier than air and may travel to distant sources of ignition and flash back. Overexposure to vapors may cause dizziness, headache and central nervous depression. The product contains small amounts of isocyanate, which can cause reactivation of prior asthma-type allergic reactions and irritation of nose, throat and lungs. **Ratings**

**Health** 2 **Flammability** 2 **Reactivity** 1

**Primary Route of Exposure:** Skin x Inhalation x Eye x Ingestion x

#### Health Effect Information

**Eye Contact:** May cause eye irritation if wiped or rubbed into eyes.

**Skin Contact:** May cause skin irritation if wiped or left on the skin

**Inhalation:** May cause irritation of respiratory tract which may result in sinusitis, bronchitis, or asthma. Breathing vapors may cause central nervous system depression.

**Ingestion:** Moderately toxic. Ingestion may cause symptoms similar to those of inhalation.

**Medical Conditions Aggravated by Exposure:** Prolonged exposure to solvents and isocyanates may aggravate allergic reactions to nose, throat and lungs.

**Eye Contact:** Immediately flush with copious amounts of lukewarm water for at least 15 minutes. Have eyes examined and treated by medical personnel.

**Skin Contact:** Dry skin with paper towel or similar. Wash affected skin thoroughly with soap and water. Immediately remove contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if any discomfort continues.

**Inhalation:** Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**Ingestion:** If swallowed, contact a physician immediately. Do not induce vomiting. Decision to induce vomiting should only be made by a physician. Never give anything by mouth to an unconscious person.

**Notes to Physician:** This product contains aromatic and aliphatic hydrocarbon solvents and aliphatic isocyanate.



## 5. FIRE AND EXPLOSION INFORMATION

### Flammable Properties

Flash Point: 106°F Test Method: TCC  
 Flame extension: NA Test Method: NA  
 Flammable Limits in Air by Volume  
 Upper Percent: 13  
 Lower Percent: 1  
 Autoignition Temperature: NA Test Method: NA

**NEPA Classification:** H 2 F 2 R 1

**Extinguishing Media:** CO<sub>2</sub>, foam or dry chemicals. **Fire Fighting Measures**

**Special Fire Fighting Procedures and Equipment:** Use alcohol resistant foam, carbon dioxide, dry chemical to fight fires. Water spray may be used to cool containers. Water or foam may cause frothing if liquid is burning. When entering fire area wear NIOSH/OSHA approved, self-contained breathing apparatus and full protective gear.

**Unusual Fire and Explosion Conditions:** Vapors may be ignited by heat or sparks. Vapors are heavier than air and may travel to distant sources of ignition and flash back. Heat-exposed containers may burst. Material may collect static charges which can cause an incendiary electrical discharge. Empty container contains product residues. Do not pressurize, cut, weld, drill, grind or expose empty containers to heat flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death. **Hazardous Combustion By-Products:** CO, CO<sub>2</sub>, N<sub>2</sub>O, HCN, unburned hydrocarbons, toxic fumes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personnel Safeguards:** Immediately evacuate all non-essential personnel to safe places. Emergency responders should wear positive pressure supplied air respirator with full face piece and proper protective gear before entering the affected area.

**Regulatory Notifications:** Waste of this product is defined as hazardous according to U.S. EPA. Spill reporting requirements and reportable quantities vary by region. Consult all applicable state and local regulations. For Canada, observe all precautions noted above.

**Containment and Clean-up:** Remove all sources of ignition. Provide ventilation. Respiratory protection is recommended during spill clean-up. Stop leak if possible without risk. Prevent liquids from entering sewers, drains or waterways by diking with sand or earth. Absorb with vermiculite or other absorbent material, then flush area with decontamination solution. Put in open drums. Treat and clean with decontamination solution consisting of water containing 4-8% ammonia and 2% detergent.

## 7. HANDLING AND STORAGE INFORMATION

**Handling:** Provide good ventilation. Avoid prolonged contact with the skin. Air circulations and exhaustion of isocyanate or solvent vapors must be maintained until the coatings have fully cured to insure that no potential fire, explosion or health hazard remains. Use solvent resistant gloves. Avoid rubbing eyes while handling. Respiratory caution to be taken if the cured product is ground or sanded as this may generate hazardous dusts.

**Storage:** Store in cool, dry, ventilated space away from direct sunlight. Keep away from heat, sparks, open flames, electrical equipment, welding torches, pilot lights, etc. Store at 10-30° C

### Empty Container Warnings

**Drums:** Do not reuse empty drums or containers. Do not cut, drill, grind or weld on or near the empty drum. **Plastic:** Do not reuse empty containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

### Exposure Limits and Guidelines

Component	CAS No.	Exposure Limit
Quartz (respirable)	14808-60-7	0.05 mg/m <sup>3</sup> TWA, NIOSH
Aromatic hydrocarbon solvent	64742-95-6	100ppm ACGIH TWA
Aliphatic diisocyanate	4098-71-9	0.005ppm OSHA PEL

### Personal Protective Equipment

**Eye/Face Protection:** Wear safety goggles

**Skin Protection:** Use solvent resistant gloves and long sleeved clothing.

**Respiratory Protection:** If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied air respirator with a full-face piece during application. After application use CCR (Chemical Cartridge Respirator). **Personal Hygiene:** Avoid rubbing eyes during handling. Wear chemical tight goggles or full face shield. Use good personal hygiene practices to avoid incidental ingestion.

### Engineering Controls/Work Practices

**Ventilation:** Provide local exhaust or area ventilation to maintain concentration of vapors below TLV.

Use explosion proof ventilation equipment. Take care not to draw vapors into non-explosion proof or spark generating equipment or into occupied office areas or enclosed areas with inhabitants.

**Other:** Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating, smoking and using toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colored viscous liquid	Octanol/Water Coefficient: Log K = ND
Odor: Typical solvent odor	Vapor Pressure: ND
Physical state: Viscous liquid	Vapor Density (air=1): > air
PH: Not applicable	Percent Volatile by Volume: 24-30
DOT Corrosivity: Not applicable	Volatile Organic Content: < 250 g/liter
Boiling Point: 284 to 500 F	Molecular Weight: NA
Melting Point: NA	Average Carbon Number: NA
Specific Gravity: 1.15	Viscosity @ 100°F: NA
Pour Point: NA	Viscosity @ 40°C: NA
Solubility in Water: Negligible	

## 10. STABILITY AND REACTIVITY INFORMATION

**Chemical Stability:** Stable under normal conditions. Avoid heat, sparks, flames  
**Conditions to Avoid:** Avoid contact with strong oxidizing materials and bases. Avoid contact with water. **Incompatible Materials to Avoid:** Strong oxidizers. Alkali metals.

## 11. TOXICOLOGICAL INFORMATION (will only print available data)

**Primary Eye Irritation:** Irritating  
**Primary Skin Irritation:** Irritating  
**Acute Dermal Toxicity:** NA  
**Subacute Dermal Toxicity:** NA  
**Dermal Sensitization:** NA  
**Inhalation Toxicity:** NA  
**Inhalation Sensitization:** NA  
**Oral Toxicity:** Mutagenicity: NA  
**Carcinogenicity:** Diisocyanates are suspect carcinogens. When ingested, diisocyanates have caused cancer in certain animals. Crystalline silica is a carcinogen, listed as Human Carcinogen Category 1 in IARC. California Proposition 65 Chemicals and NIOSH also list respirable crystalline silica as carcinogenic. Keep it below 0.05 mg/m<sup>3</sup>.  
**Reproductive Toxicity:** NA  
**Teratogenicity:** NA  
**Immunotoxicity:** NA  
**Neurotoxicity:** NA  
**Other:** NA  
**No other toxicological information available**

## 12. ECOLOGICAL INFORMATION Aquatic

**Toxicity:** Not known.  
**Terrestrial Toxicity:** Not known  
**Chemical Fate and Transport:** Not known.  
**No other ecological information available**

## 13. DISPOSAL INFORMATION

**Regulatory Information:** Consult all regulations (federal, state, provincial, local etc.) or a qualified waste disposal firm when characterizing waste for disposal.  
**Waste Disposal Methods:** Mix the chemical with an inert material such as sand, vermiculite, etc. and place in a suitable container. Dispose of in accordance with federal, state and local environmental control laws.

## 14. TRANSPORTATION INFORMATION

This section is provided to assist in the basic domestic DOT shipping classification of this product and does not contain all regulatory transportation details. Review all applicable domestic air and vessel and all international air, vessel and ground transportation regulations for other requirements and restrictions

**DOT Basic Description:** Paint  
**Hazard Class:** 3  
**UN Number:** 1263  
**Packing Group:** III  
**Description:** Combustible Liquid n.o.s.  
**Other:** Not regulated for non-bulk domestic ground shipments for packaging of 450 liters (119 gallons) or less (DOT 49CFR 173.150 (f)).



IATA UN Number: UN 1263  
IATA Air Shipping Name: Paint  
IATA Hazard Class: 3  
IATA Packing Group: III  
IATA / IMDG Description: UN1263, Paint, Class 3, PG III, Flammable Liquid

## 15. REGULATORY INFORMATION

### Regulatory Lists

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory or exempt from listing on the TSCA Inventory.

### SARA 311/312 Categories

Acute: Yes Chronic: Yes Fire: Yes Pressure: Yes Reactive: Yes

Sara Section 313: This product contains the following Sara, Title III, Section 313 Chemicals:

Chemical Name	CAS Number
Aliphatic Diisocyanate	4098-71-9
Quartz	14808-60-7
Titanium Dioxide	13463-67-7

### Regulatory Lists Searched Health &

#### Safety:

Environmental: NA

International: NA

State: FI, MA, MN, PA, RI

National Inventories: NA

California Proposition 65 Information: **Warning!** This product contains detectable components, including the following components, which are substances or belong to classes of substances known to the State of California to cause cancer, birth defects and/or other reproductive harm.

Chemical Name	CAS Number
Aliphatic Diisocyanate	4098-71-9
Quartz	14808-60-7
Titanium Dioxide	13463-67-7

### Canadian Regulations

DSL/NDL: The components of this product are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substance List (NDL).

WHMIS Hazard Class: B3 D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. **Other Regulations:** No other information available

## 16. OTHER INFORMATION

HMIS ratings - Health: 2 Flammability: 2 Reactivity: 1 Personal Protection: G

**DISCLAIMER:** The information contained herein is accurate to the best of our knowledge and belief. However, the conditions of handling and use are beyond our control and we make no guarantee of results and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. This data and information is furnished upon the condition that the person receiving it shall make his own determination of the conditions for safe use of this product.

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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