

# Rubaroc® UV Commercial Resin

## Section 01 - Chemical and Product and Company Information

<b>Product Name</b>	Rubaroc® UV Commercial Resin
<b>Product Use</b>	No further relevant information available.
<b>Supplier Name</b>	Rubaroc 2416 Wyecroft Rd Unit #3 Oakville, ON L6L 6M6
<b>Prepared by</b>	Rubaroc Regulatory Department
<b>Phone:</b>	1 (888) 763-7276
<b>Preparation Date</b>	12/16/2016

### 24-Hour Emergency Phone

613-966-6666

## Section 02 - Composition / Information on Ingredients

Ingredients	Cas #	Percentage	Chemical Name
	9042-82-4	50–100%	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis[4-isocyanatocyclohexane]
	5124-30-1	<10%	Cyclohexane, 1,1'-methylenebis[4-isocyanato-
	6425-39-4	<10%	Morpholine, 4,4'-(oxydi-2,1-ethanediyl)bis-
	77-58-7	<5%	Stannane, dibutylbis[(1-oxododecyl)oxy]-

## Section 03 - Hazard Identification

<b>NFPA</b>	<b>Health = 3</b>	<b>Fire = 0</b>	<b>Reactivity = 0</b>
<b>HMIS III</b>	<b>H*3</b>	<b>F0</b>	<b>PH0</b>

**GHS Signal Word**     **DANGER**

**GHS Classifications**     Health, Respiratory or skin sensitization, 1 Respiratory  
 Health, Skin corrosion/irritation, 2  
 Health, Serious Eye Damage/Eye Irritation, 2 A  
 Health, Respiratory or skin sensitization, 1 Skin  
 Health, Specific target organ toxicity - Single exposure, 3

**GHS Phrases**     H334 - May cause allergy or asthma symptoms of breathing difficulties if inhaled  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H317 - May cause an allergic skin reaction  
 H335 - May cause respiratory irritation

### GHS Precautionary Statements

P285 - In case of inadequate ventilation wear respiratory protection.  
 P264 - Wash hands and exposed area thoroughly after handling.

P251 - Pressurized container: Do not pierce or burn, even after use.

P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P342+311 - Call a POISON CENTER or doctor/physician.

P302+352 - IF ON SKIN: Wash with soap and water.

Contains Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis [4-isocyanatocyclohexane], 4,4'-methylenedi(cyclohexyl isocyanate). May produce an allergic reaction.

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**Section 04 - First Aid Measures**


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<b>General Information</b>	Immediately remove any clothing soiled by the product. Remove breathing equipment only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration. Take affected persons out into the fresh air.
<b>Skin Contact</b>	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
<b>Eyes</b>	Immediately remove contact lenses if possible. Rinse opened eye for several minutes under running water. Then consult a doctor.
<b>Inhalation</b>	Supply fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek immediate medical advice. In case of unconsciousness place patient stably in side position for transportation.
<b>Ingestion</b>	Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. A person vomiting while laying on their back should be turned onto their side.
<b>Most important symptoms and effects, both acute and delayed</b>	<ul style="list-style-type: none"> <li>Asthma attacks</li> <li>Breathing difficulty</li> <li>Allergic reactions</li> <li>Nausea/Cramps</li> <li>Dizziness</li> <li>Headache</li> <li>Profuse sweating</li> <li>Disorientation</li> <li>Cyanosis</li> </ul>
<b>Hazards</b>	<ul style="list-style-type: none"> <li>Danger of pulmonary oedema.</li> <li>Danger of impaired breathing.</li> <li>Danger of pneumonia.</li> </ul>

**Indication of any immediate medical attention and special treatment needed**

Danger of convulsion.  
 Danger of disturbed cardiac rhythm.  
 If swallowed, gastric irrigation with added, activated carbon.  
 Contains isocyanates.  
 If swallowed or in case of vomiting, danger of entering the lungs.  
 Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.  
 Treat skin and mucous membrane with antihistamine and corticoid preparations.  
 In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.  
 If necessary, oxygen respiration treatment.  
 Later observation for pneumonia and pulmonary oedema.  
 Medical supervision for at least 48 hours.  
 If blue coloring appears (lips, earlobes, fingernails), give oxygen treatment as quickly as possible.

## Section 05 - Fire Fighting

**Extinguishing media**

- Alcohol resistant foam
- Fire-extinguishing powder
- Carbon dioxide
- Gaseous extinguishing agents
- Water haze or fog

**For safety reasons unsuitable extinguishing agents:** Water with full jet

### Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

**Advice for firefighters:**

- Protective equipment
- Wear self-contained respiratory protective device.
- Wear fully protective suit.
- Additional information
- Eliminate all ignition sources if safe to do so.
- Cool endangered receptacles with water fog or haze.

## Section 06 - Accidental Release Measures

**Personal Precautions**

Use respiratory protective device against the effects of fumes/dust/aerosol. Isolate area and prevent access. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

<b>Methods for cleaning up</b>	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste. Additional Spill Procedures/Neutralization: Neutralization solutions: (1) Colorimetric Laboratories Inc. (CLI) decontamination solution. (2) A mixture of 75% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10) and 5% n-propanol. (3) A mixture of 80% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10). (4) A mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent. Do not flush with water or aqueous cleansing agents
<b>Environmental Precautions</b>	Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

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**Section 07 - Handling and Storage**

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<b>Handling</b>	Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols. Take note of emission threshold.
<b>Information about fire - and explosion protection:</b>	Keep respiratory protective device available.
<b>Storage</b>	Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles. Store in a cool location. Avoid storage near extreme heat, ignition sources or open flame. Information about storage in one common storage facility: Store away from foodstuffs. Store away from oxidizing agents. Do not store together with alkalis (caustic solutions). Do not store together with acids. Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles. Keep container tightly sealed. Store receptacle in a well-ventilated area.

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**Section 08 - Personal Protection and Exposure Controls**

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**Engineering Controls** Educate and train employees in safe use of this product. Follow all label instruction. Local exhaust should be used to maintain levels below the TLV whenever this product is processed, heated or spray applied. For spray applications, an air-supplied respirator must be worn. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

**Personal Protective Equipment**

**General protective and hygienic measures** The usual precautionary measures are to be adhered to when handling chemicals. Personal protective equipment must be selected to prevent inhalation of vapors and contact with skin and eyes. At a bare minimum, safety glasses, gloves, apron, and combination particle/vapor respirator should be worn. In some cases, supplied air, full body suits and boots will be needed. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

**Respiratory protection**

Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin. Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

**Protection of hands**

Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

<b>Material of gloves</b>	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
<b>Penetration time of glove material</b>	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
<b>For the permanent contact gloves made of the following materials are suitable</b>	Nitrile rubber, NBR Butyl rubber, BR
<b>Eye protection</b>	Contact lenses should not be worn. Safety glasses
<b>Body protection</b>	Boots Apron Full head, face and neck protection Impervious protective clothing
<b>Limitation and supervision of exposure into the environment</b>	No further relevant information available.
<b>Risk management measures</b>	Organizational measures should be in place for all activities involving this product.
<b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>5124-30-1 4,4'-methylenedi(cyclohexyl isocyanate)</b>	
REL (USA) Short-term value: C 0,11 mg/m <sup>3</sup> , C 0,01 ppm	
TLV (USA) 0,054 mg/m <sup>3</sup> , 0,005 ppm	
EL (Canada) Short-term value: C 0,01 ppm / Long-term value: 0,005 ppm	
EV (Canada) 0,005 ppm	
<b>77-58-7 dibutyltin dilaurate</b>	
PEL (USA) 0,1 mg/m <sup>3</sup> as Sn	
REL (USA) 0,1 mg/m <sup>3</sup> as Sn, Skin	
TLV (USA) Short-term value: 0,2 mg/m <sup>3</sup> / Long-term value: 0,1 mg/m <sup>3</sup> as Sn; Skin	
EL (Canada) Short-term value: 0,2 mg/m <sup>3</sup> / Long-term value: 0,1 mg/m <sup>3</sup> as Sn; Skin	
<b>DNELs</b> No further relevant information available.	
<b>PNECs</b> No further relevant information available.	

**Section 09 - Physical and Chemical Properties**

Form	Liquid
Color	Clear
VOC	0 g/L
Spec Grav./Density	1 g/cm <sup>3</sup>

**Section 10 - Stability and Reactivity**

<b>Stability</b>	No decomposition if used and stored according to specifications.
<b>Conditions to Avoid</b>	Keep ignition sources away - Do not smoke. Store away from oxidizing agents.
<b>Materials to Avoid</b>	Reacts with water. Reacts with oxidizing agents. Reacts with alkali, amines and strong acids. Contact with acids releases toxic gases. Reacts with peroxides and other radical forming substances. Reacts with certain metals.
<b>Hazardous Decomposition</b>	Isocyanate Nitrogen oxides Carbon monoxide and carbon dioxide Hydrogen cyanide (prussic acid)
<b>Hazardous Polymerization</b>	Reacts with water.

**Section 11 - Toxicological Information**

<b>Acute toxicity:</b>	
<b>Primary irritant effect:</b>	on the skin: Irritant to skin and mucous membranes. on the eye: Irritating effect.
<b>Sensitization</b>	Sensitization possible through inhalation. Sensitization possible through skin contact.
<b>Additional toxicological information</b>	The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for preparations as issued in the latest version: Toxic Harmful Irritant Danger through skin adsorption. Toxic/corrosive effects may be delayed up to 24 hours.
<b>Sensitisation</b>	Sensitization possible by inhalation and/or dermal contact.

**Repeated dose toxicity:** May cause damage to organs through prolonged or repeated exposure.  
Repeated exposures may result in skin and/or respiratory sensitivity.

## Section 12 - Ecological Information

**Aquatic Toxicity** The product contains materials that are harmful to the environment.

**Persistence and degradability** Not easily biodegradable

**Bio-accumulative potential** May be accumulated in organism

**Mobility in soil** No further relevant information available.

**Ecotoxic effects**

**Remark: Harmful to fish** Due to mechanical actions of the product (e.g. agglutinations) damages may occur. The product is oxygen consuming. The declared action may be partly caused by lack of oxygen. Section 13 - Disposal Consideration

### Additional ecological information

**General notes** This statement was deduced from products with a similar structure or composition.

The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary  
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment cannot be excluded.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

### Results of PBT and vPvB assessment

**PBT** Not applicable.

**vPvB** Not applicable.

**Other adverse effects** No further relevant information available.



**13 – Disposal Consideration**

**Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging**

**Recommendation** Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

**Section 14 - Transportation Information**
**UN Number**

**DOT, ADR, AND, IMDG** Not Regulated

**IATA** UV3334

**UN Proper Shipping Name**

**DOT, ADR, AND, IMDG** Not Regulated

**IATA** Aviation regulated liquid, n.o.s. (Hydrogenated MDI Polypropylene glycol copolymer)

**Transport Hazard Class(es)**

**DOT, ADR, AND, IMDG**

**Class** Not Regulated

**Packing Group**

**DOT, ADR, IMDG** Not Regulated

**IATA** III

**Environmental Hazards**

**Marine pollutant** No

**Special precautions for users** Not applicable

**Transport in bulk according to Annex II of MARPOL73/7 and the IBC Code** Not applicable.

**Transport/Additional information:**
**IMDG**

**Limited quantities (LQ)** -

**Excepted quantities (EQ) Code** -

**UN "Model Regulation"** -

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**Section 15 - Regulatory Information**

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**Component / CAS/PERC / Codes**

\*Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis[4-

isocyanatocyclohexane] (9042824 50-100%) TSCA

\*Cyclohexane, 1,1'-methylenebis[4-isocyanato- (5124301 <10%) MASS, OSHAWAC, PA, SARA313, TSCA, TXAIR

\*Morpholine, 4,4'-(oxydi-2,1-ethanediyl)bis- (6425394 <10%) TSCA

\*Stannane, dibutylbis[(1-oxododecyl)oxy]- (77587 <5%) TSCA

**Regulatory Key Descriptors**

TSCA Toxic Substances Control Act

OSHAWAC OSHA Workplace Air Contaminants

PA PA Right-To-Know List of Hazardous Substances

SARA313 SARA 313 Title III Toxic Chemicals

TXAIR TX Air Contaminants with Health Effects Screening Level

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**Section 16 - Other Information**

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