







# **Safety Data Sheet**

	Product Name		VPC-50 OC
	Chemical Name		Polyurethane Resin/B-side
	Product Type		Liquid
	Product Use	·····•	Component B of a Spray-Applied Polyurethane System
.2	Name, Address, and Telephone	of the Responsible Party	
	Company		Victory Polymers Corp. 1700 Post Oak Boulevard 2 BLVD Place, Suite 600 Houston, TX 77056   U.S.A.
	Telephone Number		1-832-240-7222 / International: 001-832-240-7222
	Email		info@VictoryPolymers.com
	Website		www.VictoryPolymers.com
.3	Emergency Telephone Number		
	For Hazardous Materials [or Dangerou	- C d-1 l., -: d + C:	
	Fire, Exposure, or Accident, Call CHEM	s Goods I incident Spill, Leak, TREC Day or Night:	1-800-424-9300
	Fire, Exposure, or Accident, Call CHEM  Outside USA and Canada (collect calls	TREC Day or Night:	1-800-424-9300 +1-703-527-3887 CCN838152
iect	Fire, Exposure, or Accident, Call CHEM	TREC Day or Night:	
	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls	TREC Day or Night:	
	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls ion 2: Hazards Identification	TREC Day or Night:	
	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls  ion 2: Hazards Identification GHS Ratings	TREC Day or Night: accepted):	+1-703-527-3887 CCN838152
Sect 2.1	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls  ion 2: Hazards Identification GHS Ratings Oral Toxicity	TREC Day or Night: accepted):  Acute Tox. 4	+1-703-527-3887 CCN838152  Oral>300+<=2000mg/kg
	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls  ion 2: Hazards Identification GHS Ratings Oral Toxicity Inhalation Toxicity	Acute Tox. 4 Acute Tox. 4	+1-703-527-3887 CCN838152  Oral>300+<=2000mg/kg  Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts&mists>1+<=5mg/l Reversible adverse effects in dermal tissue,
	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls  ion 2: Hazards Identification GHS Ratings Oral Toxicity Inhalation Toxicity Skin Corrosive	Acute Tox. 4 Acute Tox. 4	+1-703-527-3887 CCN838152  Oral>300+<=2000mg/kg  Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts&mists>1+<=5mg/l  Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation  Serious eye damage: Irreversible damage 21 days after exposure,
	Fire, Exposure, or Accident, Call CHEM' Outside USA and Canada (collect calls  ion 2: Hazards Identification  GHS Ratings Oral Toxicity Inhalation Toxicity Skin Corrosive  Eye Corrosive	Acute Tox. 4 Acute Tox. 4 2	+1-703-527-3887 CCN838152  Oral>300+<=2000mg/kg  Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts&mists>1+<=5mg/l Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation  Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5  Acute toxicity > 10.0 but <= 100.0 mg/l and lack of rapid degradability
2.1	Fire, Exposure, or Accident, Call CHEM Outside USA and Canada (collect calls  ion 2: Hazards Identification GHS Ratings Oral Toxicity Inhalation Toxicity Skin Corrosive  Eye Corrosive  Aquatic toxicity	Acute Tox. 4 Acute Tox. 4 2	+1-703-527-3887 CCN838152  Oral>300+<=2000mg/kg  Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts&mists>1+<=5mg/l Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation  Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5  Acute toxicity > 10.0 but <= 100.0 mg/l and lack of rapid degradability
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GHS Precautions	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P310	Immediately call a POISON CENTER in case of overexposure.
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P321	Specific treatment is urgent (see Section 4 First Aid measures)
P330	Rinse mouth
P362	Take off contaminated clothing and wash before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P332+P313	If skin irritation occurs: Get medical advice/attention
P501	Dispose of contents/container in accordance with existing federal, state, and local environmental control laws.

# 2.4 GHS Label Elements Including Precautionary Statements

## **Hazard Pictograms**





Signal Word	Danger
Acute Toxicity	
Eyes	Corrosive to eyes.
Skin	Irritating to skin.
Inhalation	Not expected to be a route of exposure.
Ingestion	Harmful if swallowed. Consult physician.
Chronic Effects	Possible harmful target organ effects.

# **Section 3: Composition/Data on Components**

Chemical Name	CAS number	Weight Concentration %
2-Propanol, 1-chloro-, phosphate (3:1)	13674-84-5	20.00% - 30.00%
Poly(oxy-1,2-ethanediyl), .alpha(4-nonylphenyl)omegahydroxy-, branched	127087-87-0	10.00% - 20.00%
Tertiary amine	N/A	1.00% - 5.00%
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]-	2212-32-0	1.00% - 5.00%
Bis(2-dimethylaminoethyl) ether	3033-62-3	0.10% - 1.00%
1,4-Dioxane	123-91-1	0.00% - 0.10%



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ction 4: First-Aid Measures			
Inhalation	If inhaled and symptoms ensue,	move to fresh air. If breathing is difficult, give	oxygen.
After Eye Contact	Rinse opened eye for at least 15 rinsing. If irritation persists conta		t lenses if present and easy to do so, and continue
After Skin Contact	Clean affected area with soap an	d plenty of water.	
After Swallowing	Consult physician.		
Notes to Physician	Treat symptomatically.		
ction 5: Firefighting Measures			
Flash Point	200°C (392°F)		
LEL	N/A		
UEL	N/A		
Upper and Lower Explosive Limits listed i	f known		
Suitable Extinguishing Agents	Water spray, CO <sup>2</sup> , Foam, Dry cher	nical.	
Information about Protection against Explosions and Fires	Keep away from flames and sour	ces of heat. Closed containers may rupture w	hen exposed to extreme heat.
Dangerous Products of Decomposition Protective Equipment	• • • • • • • • • • • • • • • • • • • •	gen, oxides of phosphorus, hydrocarbons, trac ure demand self-contained breathing apparat	· · · · · · · · · · · · · · · · · · ·
tion 6: Accidental Release Measu	res		
Person-Related Safety Precautions	Use appropriate personal protect Avoid contact with skin and eyes	tive equipment during clean up. Evacuate anc s.	l keep unnecessary people out of spill area.
Measures for Environmental Protection Small Spills	Absorb with earth, sand or other	· · · · · · · · · · · · · · · · · · ·	cording to local, state, and federal regulations. ntainers for later disposal. Wipe up with absorbent mination.
Large Spills			e this is possible. Use a non-combustible material er for later disposal. Following product recovery, flu
tion 7: Handling and Storage			
Information for Safe Handling	Avoid contact with eyes, skin, or	inhalation.	
Storage Requirements		Keep containers tightly closed. Store betwee	n 60°F-100°F. Material may settle.
Regulatory Requirements	Obey all local, state, and federal	·····	· · · · · · · · · · · · · · · · · · ·
tion 8: Exposure Controls and Per	sonal Protection		
Occupational Exposure Limits			
Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5	Not Established	Not Established	Not Established
Poly(oxy-1,2-ethanediyl), .alpha(4-nonylphenyl)omegahydroxy-, branched 127087-87-0	Not Established	Not Established	Not Established
Tertiary amine N/A	Not Established	Not Established	Not Established
Ethanol, 2-[[2-(dimethylamino)ethyl] methylamino]- 2212-32-0	Not Established	Not Established	Not Established
Bis(2-dimethylaminoethyl) ether 3033-62-3	Not Established	0.15 ppm STEL 0.05 ppm TWA	Not Established
1,4-Dioxane 123-91-1	100 ppm TWA	20 ppm TWA	Not Established
Engineering Controls		proper PPE precautions are followed.	ive Established



2	Individual Protection Measures				'
	General Protective and Hygienic Measures	Usual precautionary measures	should be adhered to when handling chemicals.		
	Respiratory Protection	In spray applications, an organ	ic vapor/particulate respirator or air supplied unit is nece	ssary.	
	Protection of Hands	Protective chemical resistant g	loves.		
	Eye Protection	Chemical resistant goggles mu	st be worn.		
	Body Protection	Protective work clothing. Laun	der separately.	••••••	
	Contaminated Gear	Observe local requirements. Di	spose of in accordance with local/state/federal regulation	ns.	
ct	ion 9: Physical and Chemical Pro	perties			
	Physical properties listed where known				1
	Appearance	Amber liquid	Odor	Amine odor	
	Vapor Pressure	N/A	Odor Threshold	N/A	
	Vapor Density	N/A	рН	N/A	••••••
	Specific Gravity	1.14	Melting Point	N/A	
	Freezing Point	N/A	Solubility	N/A	
	Boiling Range	100 - 342°C	Flash Point	392°F (200°C)	
	Evaporation Rate	N/A	Flammability	N/A	
	Explosive Limits	N/A	Partition Coefficient (n-octanol/water)	N/A	•••••••
	Autoignition Temperature	N/A	Decomposition Temperature	N/A	• • • • • • • • • • • • • • • • • • • •
ect	ion 10: Stability and Reactivity				
ect		Avoid contact with isocyanate:	s and strong oxidizing agents.		
ct	ion 10: Stability and Reactivity  Chemical Incompatible Materials  Hazardous Polymerization	Avoid contact with isocyanate.  Not expected to occur.	s and strong oxidizing agents.		
ect	Chemical Incompatible Materials	Not expected to occur.	s and strong oxidizing agents. rogen, oxides of phosphorus, hydrocarbons, traces of HCN	N, hydrogen chloride gas.	
	Chemical Incompatible Materials Hazardous Polymerization	Not expected to occur. Oxides of carbon, oxides of nit		N, hydrogen chloride gas.	
	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition	Not expected to occur. Oxides of carbon, oxides of nit		N, hydrogen chloride gas.	
ct	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition ion 11: Toxicological Information Mixture Toxicity	Not expected to occur. Oxides of carbon, oxides of nit		N, hydrogen chloride gas.	
ct	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition ion 11: Toxicological Information	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg		N, hydrogen chloride gas.	
ct	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50	Not expected to occur. Oxides of carbon, oxides of nit		N, hydrogen chloride gas.	
ct	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50	Not expected to occur. Oxides of carbon, oxides of nit  1.653mg/kg 2,547mg/kg		N, hydrogen chloride gas.	
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50	Not expected to occur. Oxides of carbon, oxides of nit  1.653mg/kg 2,547mg/kg		N, hydrogen chloride gas.  Dermal LD50	Inhalation LC50
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50 Component Toxicity	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg 2,547mg/kg 16mg/L	rogen, oxides of phosphorus, hydrocarbons, traces of HCN Oral LD50		Inhalation LC50 5 mg/L (Rat)
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50 Component Toxicity Product	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg 2,547mg/kg 16mg/L  Description	Oral LD50 te (3:1)  Oral LD50 1,310 mg/kg (Rat)	Dermal LD50	
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50  Component Toxicity Product 13674-84-5	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg 2,547mg/kg 16mg/L  Description 2-Propanol, 1-chloro-, phospha	Oral LD50 te (3:1)  Oral LD50 1,310 mg/kg (Rat)	Dermal LD50 1,230 mg/kg (Rabbit)	
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50  Component Toxicity Product 13674-84-5 127087-87-0	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg 2,547mg/kg 16mg/L  Description 2-Propanol, 1-chloro-, phospha Poly(oxy-1,2-ethanediyl), .alpha(4-nonylphenyl)omeg	Oral LD50  Ite (3:1)  500 mg/kg (Rat)  1,310 mg/kg (Rat)  1,290 mg/kg (Rat)	Dermal LD50 1,230 mg/kg (Rabbit) 2,000 mg/kg (Rabbit)	5 mg/L (Rat)
ect	Chemical Incompatible Materials Hazardous Polymerization Dangerous Products of Decomposition  ion 11: Toxicological Information Mixture Toxicity Oral Toxicity LD50 Dermal Toxicity LD50 Inhalation Toxicity LC50  Component Toxicity Product 13674-84-5 127087-87-0  Tertiary amine	Not expected to occur. Oxides of carbon, oxides of nit  1,653mg/kg 2,547mg/kg 16mg/L  Description 2-Propanol, 1-chloro-, phospha Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)omeg Tertiary amine	Oral LD50  Ite (3:1) 500 mg/kg (Rat)  1,310 mg/kg (Rat)  2ahydroxy-, branched  1,290 mg/kg (Rat)  2,000 mg/kg (Rat)	Dermal LD50 1,230 mg/kg (Rabbit) 2,000 mg/kg (Rabbit) 370 mg/kg (Rabbit)	5 mg/L (Rat) 3 mg/L (Rat)



## 1.3 Individual Toxicity Values Listed if Known

Acute Toxicity			
Eyes	Corrosive to eyes.	Chronic Effects	Possible harmful target organ effects.
Skin	Irritating to skin.	Routes of Entry	Ingestion, skin contact, eye contact.
Inhalation	Not expected to be a route of exposure.	Target Organs	Skin, eyes, reproductive system, kidneys
Ingestion	Harmful if swallowed. Consult physician.		

#### **Chemicals with Known or Possible Carcinogenic Effects**

CAS Number	Description	% Weight	Carcinogen Rating
123-91-1	1,4-Dioxane	0.0 to 0.1%	1,4-Dioxane: IARC group 2B -
			Possibly carcinogenic to humans

### **Section 12: Ecological Information**

#### 12.1 General Information

Based on experience, no adverse effects are to be expected if correct disposal procedures have been followed as indicated in section 13. Individual component ecotoxicity listed if known.

## 12.2 Component Ecotoxicity

Product/Ingredient Name	Result			
2-Propanol, 1-chloro-, phosphate (3:1)	96 Hr LC50 Brachydanio rerio:	56.2 mg/L [static]	48 Hr EC50 Daphnia magna:	63 mg/L
	96 Hr LC50 Pimephales promelas:	98 mg/L [static]	72 Hr EC50 Desmodesmus subspicatus:	45 mg/L
	96 Hr LC50 Poecilia reticulata:	30 mg/L [static]	96 Hr EC50 Pseudokirchneriella subcapitata:	4 mg/L
Poly(oxy-1,2-ethanediyl), .alpha(4-nonylphenyl)omegahydroxy-,	48 Hr LC50 Pimephales pormelas (fathead minnow):	3.8 - 6.2 mg/L		
branched	48 Hr EC50 Daphnia magna:	9.3 - 21.4 mg/L		
	16 Hr IC50 Bacteria:	>1,000 mg/L		
Tertiary amine	72 Hr ErC50 Selenastrum capricornutum:	7.9 mg/L		
	72 Hr NOEC Selenastrum capricornutum:	1.2 mg/L		

#### **Section 13: Disposal Considerations**

Recommendation	Observe local requirements. Dispose of in accordance with local/state/federal regulations.
Empty Container Precautions	Recondition or dispose of empty container in accordance with governmental regulations. If container is to be disposed, ensure all product residues are removed and container is empty prior to disposal.

## **Section 14: Transport Information**

## 14.1 DOT Regulated Components

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods unless specifically cited below:

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
	None			



## **Section 15: Regulatory Information**

## 15.1 OSHA Hazard Communication Standard:

This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

## 15.2 SARA 311/312 Hazard Categories

Acute health hazard, chronic health hazard

#### 15.3 WARNING

This product can expose you to chemicals listed below, which are known to the State of California to cause cancer, birth defects, or reproductive harm. For more information, visit www.P65Warnings.ca.gov

Chemical	CAS#		
Ethylene Oxide	75-21-8	1 PPM	CARC
1.4-Dioxane	123-91-1	4 PPM	CARC

#### 15.4 State Regulations

Massachusetts Right To Know List	None
New Jersey Right To Know List	None
Pennsylvania Right To Know List	None

#### 15.5 SARA 302 Extremely Hazardous Substances

None

#### 15.6 Chemicals subject to SARA 313 Reporting

None

Country	Regulation	All Components Listed
Canada	Canada DSL	Yes
US	Toxic Substances Control Act	Yes

### **Section 16: Other Information**

Safety Data Sheet issued by Product Safety Department	This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Victory Polymers Corp. The data on these sheets relates only to the specific material designated herein. Victory Polymers Corp. assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.
Prepared By	Victory Polymers Corp.
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