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## 1. Product and Company Identification

**Product Code:** 510-CV-OP

**Product Name:** 510 CV/OP - Binder/Bodycoat - Part A

Key Resin Company **Company Name: Phone Number:** +1 (513)943-4225

4050 Clough Woods Dr.

Batavia, OH 45103

Chemtrec (USA) **Emergency Contact:** (800)424-9300

> Chemtrec (International) +1 (703)527-3887

#### 2. Hazards Identification

Skin Corrosion/Irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 2B

Aquatic Toxicity (Chronic), Category 2 Aquatic Toxicity (Acute), Category 3





**GHS Hazard Phrases:** 

H315 - Causes skin irritation.

H320 - Causes eye irritation. H402 - Harmful to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

**GHS Precaution Phrases:** 

P264 - Wash hands thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:** 

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin

irritation occurs, get medical advice/attention. P362 - Take off contaminated clothing and

wash before re-use.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation

persists, get medical advice/attention.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310 -

Immediately call a POISON CENTER or doctor/physician.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing. P391 - Collect spillage.

**GHS Storage and Disposal** 

Phrases:

P501 - Dispose of contents/container to local, state, and federal authority requirements.

This material is classified as hazardous under OSHA regulations. **OSHA Regulatory Status:** 

**Potential Health Effects** May cause eye irritation. May cause skin irritation. May cause skin sensitization, an

(Acute and Chronic): allergic reaction, which becomes evident on reexposure to this material.

Inhalation: May cause respiratory irritation.

**Skin Contact:** Causes skin irritation. Eye Contact: Causes eye irritation.

May be harmful if swallowed. Ingestion:

Medical Conditions Generally Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

Aggravated By Exposure:

1.0 - 5.0 %

0 - 3.8 %

0 - 3.8 %

0 - 3.8 %

0 - 3.8 %

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3. Composition/Information on Ingredients						
CAS#	Hazardous Components (Chemical Name)	Concentration				
25068-38-6	Bisphenol-a based epoxy resin	60 - 80 %				
107-41-5	2,4-Pentanediol, 2-Methyl-	5.0 - 12 %				
108-32-7	(+-)-Propylene carbonate, Anhydrous	5.0 - 10 %				
84852-15-3	Phenol, 4-nonyl-, branched	1.0 - 8.0 %				
112945-52-5	Silica, amorphous treated	1.0 - 8.0 %				

#### 4. First Aid Measures

Emergency and First Aid

derivs.

Iron oxide (Fe2O3)

Carbon black

Titanium dioxide

C.I. Pigment Yellow 42

Procedures:

68609-97-2

1309-37-1

51274-00-1

1333-86-4

13463-67-7

In Case of Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention

immediately.

In case of Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

Remove contaminated clothing and shoes. Get medical attention if irritation develops or

persists.

Oxirane, Mono.(.(C12-14-alkyloxy)methyl.).

In Case of Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician

immediately. Do not induce vomiting. For further assistance, contact your local Poison

Control Center.

Signs and Symptoms Of

Exposure:

May cause skin, eye, and respiratory irritation. May cause allergic skin reaction.

## 5. Fire Fighting Measures

Flash Pt: > 140.00 C (284.0 F) Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data.

Suitable Extinguishing Media: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing

Do not use a direct water stream, which may spread fire.

Media:

Fire Fighting Instructions: Protective Equipment: Wear self-contained breathing apparatus and protective clothing

to prevent contact with skin and eyes.

Flammable Properties and

Hazards:

Product is not considered a fire hazard. Closed containers may rupture (due to build up

in pressure) when exposed to extreme heat.

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6. Accidental Release Measures

Protective Precautions, **Protective Equipment and Emergency Procedures:** 

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

**Environmental Precautions:** Steps To Be Taken In Case Material Is Released Or

Prevent entry into waterways, sewers, basements or confined areas. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

Spilled:

### 7. Handling and Storage

Precautions To Be Taken in

Handling:

Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on

clothing.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place.

Storing:

Other Precautions: Wash thoroughly after handling.

## 8. Exposure Controls/Personal Protection

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
25068-38-6	Bisphenol-a based epoxy resin	No data.	No data.	No data.
107-41-5	2,4-Pentanediol, 2-Methyl-	No data.	TLV: 25 ppm CEIL: 121 mg/m3	No data.
108-32-7	(+-)-Propylene carbonate, Anhydrous	No data.	No data.	No data.
84852-15-3	Phenol, 4-nonyl-, branched	No data.	No data.	No data.
112945-52-5	Silica, amorphous treated	No data.	No data.	No data.
68609-97-2	Oxirane, Mono.(.(C12-14-alkyloxy)methyl.). derivs.	No data.	No data.	No data.
1309-37-1	Iron oxide (Fe2O3)	PEL: 10 mg/m3	TLV: 5 mg/m3 (dust & fume)	No data.
51274-00-1	C.I. Pigment Yellow 42	No data.	No data.	No data.
1333-86-4	Carbon black	PEL: 3.5 mg/m3	TLV: 3.5 mg/m3 No data.	
13463-67-7	Titanium dioxide	PEL: 15 (dust) mg/m3	TLV: 10 mg/m3 No data.	

Respiratory Equipment (Specify Type):

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Eye Protection:** Safety glasses, or goggles.

Protective Gloves: Nitrile rubber and Neoprene are recommended.

Where splashing is possible, full chemically resistant protective clothing, safety glasses Other Protective Clothing:

or face shield and boots are required.

**Engineering Controls** 

Good general ventilation should be sufficient to control airborne levels. Safety shower

(Ventilation etc.): and eve bath.

Work/Hygienic/Maintenance Wash contaminated clothing before reuse. Discard contaminated shoes. Wash

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Practices: thoroughly after handling.

**Environmental Exposure** 

Controls:

Avoid runoff into storm sewers and ditches which lead to waterways. May be hazardous to the environment if released in large quantities.

9. Physical and Chemical Properties

[X] Liquid [ ] Solid **Physical States:** [ ] Gas

Appearance and Odor: Odor: Epoxy odor.

Appearance: Clear or pigmented.

ΝE **Melting Point: Boiling Point:** NE **Decomposition Temperature: NE** Autoignition Pt: No data.

> 140.00 C (284.0 F) Method Used: Pensky-Marten Closed Cup Flash Pt:

UEL: NE **Explosive Limits:** LEL: NE

NE

ΝE

Specific Gravity (Water = 1):  $\sim 1.15 - 1.18$ ~ 9.6 - 9.85 LB/GL Density:

Vapor Pressure (vs. Air or

mm Hg):

Vapor Density (vs. Air = 1): NE **Evaporation Rate:** 

Solubility in Water:

**Solubility Notes:** Practically insoluble.

Saturated Vapor

**Concentration:** 

Percent Volatile: 0.0 % by volume.

**VOC / Volume:** NP

10. Stability and Reactivity

Reactivity: Avoid: acids, alkalis, oxidizing agents.

Unstable [ ] Stable [X] Stability:

**Conditions To Avoid -**

Extreme temperatures.

Instability:

Incompatibility - Materials To Avoid strong acids, bases, and oxidizing agents.

Avoid:

Hazardous Decomposition Or Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide.

**Byproducts:** 

Possibility of Hazardous Will not occur [X] Will occur [ ]

Polymerization:

**Conditions To Avoid -**Will not undergo hazardous polymerization in normal storage conditions.

Hazardous Reactions:

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11. Toxicological Information

May cause sensitization by skin contact. Toxicological Information:

Irritation or Corrosion: Skin Irritation. Irritating to eyes. Skin Irritation. Slight Irritant to eyes. Symptoms related to

**Toxicological** Characteristics:

Chronic Toxicological Effects:

12. Ecological Information

General Ecological Avoid release to the environment. May be hazardous to the environment if released in

Information: large quantities. No data available.

Results of PBT and vPvB

assessment:

Skin sensitization.

Persistence and

Not readily biodegradable.

Degradability:

**Bioaccumulative Potential:** No data available. Mobility in Soil: not reported, unknown.

13. Disposal Considerations

Incinerate or dispose of unused material, residues and containers in a licensed facility in **Waste Disposal Method:** 

accordance with all applicable local, state and federal regulations. Do not discharge

substance/product into sewage system.

14. Transport Information

LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** (Non-Bulk)

Not Regulated.

(Bulk)

PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or aircraft.

**DOT Hazard Class:** CLASS 9 9

**UN/NA Number: Packing Group:** 

**Precautionary Label:** Avoid skin and eye contact. May cause eye and skin irritation. May cause skin

sensitization. Wear protective equipment and clothing. Always read MSDS/SDS

before use.



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

Note: The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that

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mode of transport. Shipment compliance is the responsibility of the person offering

the product for transport.

UN Number: 3082 Packing Group:

Hazard Class: 9 - CLASS 9

IMDG EMS Number: FA-SF IMDG MFAG Number:

IMDG EMS Page: Yes

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: (Non-Bulk)

Not Regulated.

(Bulk)

PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or aircraft.

### 15. Regulatory Information

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
25068-38-6	Bisphenol-a based epoxy resin	No	No	No
107-41-5	2,4-Pentanediol, 2-Methyl-	No	No	No
108-32-7	(+-)-Propylene carbonate, Anhydrous	No	No	No
84852-15-3	Phenol, 4-nonyl-, branched	No	No	No
112945-52-5	Silica, amorphous treated	No	No	No
68609-97-2	Oxirane, Mono.(.(C12-14-alkyloxy)methyl.). derivs.	No	No	No
1309-37-1	Iron oxide (Fe2O3)	No	No	No
51274-00-1	C.I. Pigment Yellow 42	No	No	No
1333-86-4	Carbon black	No	No	No
13463-67-7	Titanium dioxide	No	No	No

This material meets the EPA [X] Yes [] No Acute (immediate) Health Hazard
'Hazard Categories' defined for SARA Title III Sections
311/312 as indicated: [] Yes [X] No Fire Hazard
[] Yes [X] No Reactive Hazard

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**Regulatory Information:** TSCA (Toxic Substance Control Act): All components are listed or exempt.

16. Other Information

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Hazard Rating System:

HEALTH 2
FLAMMABILITY 1
PHYSICAL 0
PPE X

HMIS:

Additional Information About CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED

This Product: NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

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The information contained in this MSDS is taken from sources believed to be accurate as

of the date hereof; however the Key Resin Company makes no expressed or implied warranty in respect to the accuracy of the information or the suitability of the

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