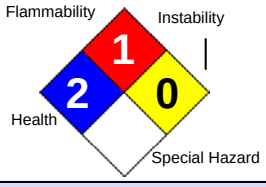
SAFETY DATA SHEET
510 CV/OP - Binder/Bodycoat - Part A

HEALTH	2
FLAMMABILITY	1
PHYSICAL	0
PPE	X



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1. Product and Company Identification

Product Code: 510-CV-OP

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

Trade Name: 510 CV/OP - Binder/Bodycoat - Part A

Manufacturer Information

Company Name: Key Resin Company
4050 Clough Woods Dr.
Batavia, OH 45103

Phone Number: +1 (513)943-4225

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

Alternate Emergency Contact: Chemtrec (International) +1 (703)527-3887

2. Hazards Identification

GHS Classification	Placard	Key word	GHS hazard phrase
Skin Corrosion/Irritation, Category 2	Exclamation point	Warning	Causes skin irritation
Serious Eye Damage/Eye Irritation, Category 2B	none	Warning	Causes eye irritation
Aquatic Toxicity (Chronic), Category 2	Pollution		Toxic to aquatic life with long lasting effects

GHS Hazard Phrases

H315+320 - Causes skin and eye irritation.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H411 - Toxic to aquatic life with long lasting effects.

GHS Precaution Phrases

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P262 - Do not get in eyes, on skin, or on clothing.
P260 - Do not breathe dust/mist/vapors/spray.
P273 - Avoid release to the environment.

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.
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.
P304+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. P314 - Get medical attention/advice if you feel unwell.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases

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

Potential Health Effects (Acute and Chronic)

May cause eye irritation. May cause skin irritation. May cause skin sensitization, an 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.

Ingestion

May be harmful if swallowed.

Recommended Exposure Limits

Not established.

Medical Conditions Generally Aggravated By Exposure

Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration
1. Bisphenol-a based epoxy resin	25068-38-6	60 - 80 %
2. 2,4-Pentanediol, 2-Methyl-	107-41-5	5.0 - 12 %
3. (+-)-Propylene carbonate, Anhydrous	108-32-7	5.0 - 10 %
4. Phenol, 4-nonyl-, branched	84852-15-3	1.0 - 8.0 %
5. Silica, amorphous treated	112945-52-5	1.0 - 8.0 %
6. Oxirane, Mono.(.(C12-14-alkyloxy)methyl.). derivs.	68609-97-2	1.0 - 5.0 %
7. Iron oxide (Fe2O3)	1309-37-1	0 - 3.8 %
8. C.I. Pigment Yellow 42	51274-00-1	0 - 3.8 %
9. Carbon black	1333-86-4	0 - 3.8 %
10. Titanium dioxide	13463-67-7	0 - 3.8 %

4. First Aid Measures

Emergency and First Aid Procedures

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.

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 Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data available.

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.

Hazardous Combustion Products

Hazardous decomposition products formed under fire conditions. Carbon dioxide, Carbon monoxide.

Suitable Extinguishing Media

Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media

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

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

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.

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

Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Hazard Label Information:

Avoid contact with skin and eyes. Do not get on skin and clothing. Avoid inhalation of vapor or mist.

Store in a closed container.

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 Storing

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

Other Precautions

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

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

Protective Equipment Summary - Hazard Label Information:

Neoprene gloves Safety glasses, or goggles. Impervious clothing. Chemical resistant boots

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.

Other Protective Clothing

Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)

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

Work/Hygienic/Maintenance Practices

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash 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

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Melting Point:	NE
Boiling Point:	NE
Decomposition Temperature:	NE
Autoignition Pt:	No data.
Flash Pt:	> 140.00 C Method Used: Pensky-Marten Closed Cup
Explosive Limits:	LEL: NE UEL: NE
Specific Gravity (Water = 1):	~ 1.15 - 1.18
Density:	~ 9.6 - 9.85 LB/GL
Vapor Pressure (vs. Air or mm Hg):	NE
Vapor Density (vs. Air = 1):	NE
Evaporation Rate:	NE
Solubility in Water:	~

Solubility Notes

Practically insoluble.

Percent Volatile:	0.0 % by volume.
VOC / Volume:	NP
HAP / Volume:	NP

Saturated Vapor Concentration: NE

Appearance and Odor

Odor: Epoxy odor.

Appearance: Clear or pigmented.

10. Stability and Reactivity

Stability: Unstable [ ] Stable [X]

Reactivity

Avoid: acids, alkalis, oxidizing agents.

Conditions To Avoid - Instability

Extreme temperatures.

Incompatibility - Materials To Avoid

Avoid strong acids, bases, and oxidizing agents.

Hazardous Decomposition Or Byproducts

Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide.

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

Conditions To Avoid - Hazardous Reactions

Will not undergo hazardous polymerization in normal storage conditions.

11. Toxicological Information

Toxicological Information

May cause sensitization by skin contact.

Chronic Toxicological Effects

Skin sensitization.

Irritation or Corrosion

Skin Irritation. Irritating to eyes.

Symptoms related to Toxicological Characteristics

Skin Irritation. Slight Irritant to eyes.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Bisphenol-a based epoxy resin	25068-38-6	n.a.	n.a.	n.a.	n.a.
2. 2,4-Pentanediol, 2-Methyl-	107-41-5	No	No	No	No
3. (+-)-Propylene carbonate, Anhydrous	108-32-7	n.a.	n.a.	n.a.	n.a.
4. Phenol, 4-nonyl-, branched	84852-15-3	n.a.	n.a.	n.a.	n.a.
5. Silica, amorphous treated	112945-52-5	n.a.	n.a.	n.a.	n.a.
6. Oxirane, Mono.(.(C12-14-alkyloxy)methyl.). derivs.	68609-97-2	n.a.	n.a.	n.a.	n.a.
7. Iron oxide (Fe2O3)	1309-37-1	n.a.	3	A4	n.a.
8. C.I. Pigment Yellow 42	51274-00-1	n.a.	n.a.	n.a.	n.a.
9. Carbon black	1333-86-4	n.a.	2B	A4	n.a.
10. Titanium dioxide	13463-67-7	n.a.	2B	A4	n.a.

12. Ecological Information

General Ecological Information

Avoid release to the environment. May be hazardous to the environment if released in large quantities.

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

Not readily biodegradable.

Bioaccumulative Potential

No data available.

Mobility in Soil

not reported, unknown.

13. Disposal Considerations

Waste Disposal Method

Incinerate or dispose of unused material, residues and containers in a licensed facility in 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:	9
DOT Hazard Label:	CLASS 9
UN/NA Number:	UN3082
Packing Group:	III
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.

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.
UN Number:	3082
Hazard Class:	9 - CLASS 9
Packing Group:	III

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

offering the product for transport.

UN Number:	3082
Hazard Class:	9 - CLASS 9
Packing Group:	III
IMDG EMS Number:	FA-SF
Marine Pollutant:	Yes

15. Regulatory Information

Regulatory Information

SARA 302 Extremely Hazardous Substances: None.

SARA Section 311/312: Acute Health Hazard.

SARA 313 Toxic Chemicals: None.

CERCLA Reportable Quantity: None.

16. Other Information

CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

Company Policy or Disclaimer

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 recommendations, and assumes no liabilities to any user thereof.

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