



ChemShield 1788 Resin

(Part A)

Safety Data Sheet (SDS)

Section 1 - Product and Company Identification

Trade Name: ChemShield 1788 Resin (All Versions)

Product Code: 1788-030-NU1A-01-RES

Company:

Wolverine Coatings Corporation
5969 US Highway 221
Roebuck, SC 29376
+1 (864) 587-3144

Emergency Contact:

ChemTel 24 Hr. US Emergency Number:
+1 (800) 255-3924
ChemTel 24 Hr. Worldwide Emergency Number:
+1 (813) 248-0585

Product Use: Coatings

Not Recommended For: None Identified

Section 2 - Hazards Identification

GHS Ratings:

Skin corrosion/irritation	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Serious eye damage/eye irritation	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Respiratory sensitization	1	Respiratory sensitizer
Skin sensitization	1	Skin Sensitizer
Germ cell mutagenicity	1B	Known to produce heritable mutations in human germ cells Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogenicity	1A	Known Human Carcinogen Based on human evidence
Chronic aquatic toxicity	C3	Acute toxicity > 10.0 but ≤ 100.0 mg/l and lack of rapid degradability and log Kow ≥ 4 unless BCF < 500 and unless chronic toxicity > 1 mg/l

GHS Hazards:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340	May cause genetic defects
H350	May cause cancer
H412	Harmful to aquatic life with long lasting effects

GHS Precautions:

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection

P321	Specific treatment (see label)
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P304+P341	IF INHALED: If breathing is difficult, 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
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	If eye irritation persists, get medical advice/attention
P342+P311	Call a POISON CENTER or doctor/physician
P405	Store locked up
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

Signal Word: Danger



Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Epoxy Phenol Novalac Resin	28064-14-4	50.00% - 60.00%
Quartz	14808-60-7	30.00% - 40.00%
1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8	5.00% - 10.00%
Trade Secret		1.00% - 5.00%
Trade Secret		1.00% - 5.00%

Section 4 - First Aid Measures

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Eye Contact: Immediately flush eyes for at least fifteen minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 183 C (361 F)

LEL:

UEL:

Extinguishing Media: Use carbon dioxide, foam, dry chemical, dry sand, water fog, or limestone powder extinguishing systems.

Unusual Fire and Explosion Hazards: None

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Stability and Reactivity) for additional information.

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus.

Fire Equipment: No Data

Section 6 - Accidental Release Measures

Spill And Leak Procedures: Avoid all personal contact. Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Spills should be contained, solidified, and placed in suitable containers for disposal.

Section 7 - Handling and Storage

Handling Precautions: Use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

Storage Requirements: Keep away from heat, sparks, and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Epoxy Phenol Novalac Resin 28064-14-4	Not Established	Not Established	Not Established
Quartz 14808-60-7	TWA30 mg/m ³ / %SiO ₂ +2 total dust TWA: 10 mg/m ³ /%SiO ₂ +2 respirable fraction	TWA: 0.025 mg/m ³	Not Established
1,4-Bis(2,3-epoxypropoxy) butane 2425-79-8	Not Established	Not Established	Not Established
Trade Secret	TLV-TWA: 15 mg/m ³ (total particles), 5 mg/m ³ (respirable particles)	TLV-TWA: 10 mg/m ³ (total particles), 3 mg/m ³ (respirable particles)	Not Established
Trade Secret	Not Established	Not Established	Not Established

Ventilation: Good general mechanical ventilation and local exhaust is recommended.

Hygiene: Eye wash must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary.

Personal Protective Equipment: Wear impervious protective gloves. Wear OSHA, NIOSH approved organic vapor respirator if ventilation is inadequate. Wear appropriate protective eyewear such as splash-proof, chemical resistant safety goggles.

Contaminated Gear: Take off all contaminated clothing immediately. Wash contaminated clothing before reuse.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance	Viscous liquid	Odor	Not Available
Physical State	Liquid	Vapor Density	1.51
Vapor Pressure	0.95 mm Hg	Boiling Range	200 to 2230 °C
Specific Gravity (SG)	1.437	Lbs VOC/Gallon Less Water	0.04

Section 10 - Stability and Reactivity

Stability:

STABLE

Components of this mixture are incompatible with the following materials:

Strong Oxidizers
Combustible materials
Strong Acids
Strong Bases
Amines
Alkalies

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide
Hydrocarbons
Smoke
Aldehydes
Phenol

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Mixture Toxicity:

Oral Toxicity LD50: 2,975mg/kg
Inhalation Toxicity LC50: 989mg/L

Component Toxicity:

Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may affect the following organs:

Lungs Respiratory System

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing):

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
14808-60-7	Quartz	30% - 40%	Quartz: If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

Section 12 - Ecological Information

Component Ecotoxicity:

Epoxy Phenol Novalac Resin	LC50 10 mg/l fish 96h; EC50 10 mg/l water flea 48h
Quartz	LC50 >10,000 mg/l fish 72h; EC50 7600 mg/L water flea 48h; EC50 440mg/L algae, 72h;
1,4-Bis(2,3-epoxypropoxy)butane	LC50 24 mg/l fish 96h; EC50 76 mg/l water daphnia 24h; EC50 160 mg/l algae 72h

Section 13 - Disposal Considerations

Waste disposal Methods: Dispose in accordance with Federal, State and Local regulations.

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Non-Regulated	N/A	N/A	N/A

IATA

IMDG

Section 15 - Regulatory Information

Additional regulatory listings, where applicable:

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
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EU Risk Phrases

Safety Phrase

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

No Data

EPA SARA Title III Section 313 (40 CFR 372) components above 'de minimum' level:

Section 16 - Other Information

For further information, please contact the Product Safety director. The information and recommendations contained herein are, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, 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 that exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. 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, or to the chemical to which the user refers.

