



SAFETY DATA SHEET

Hardener

Date Prepared : 05/14/2015

SDS No : 99.0124H

Ceramic Alloy Liquid - Blue / Red

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Ceramic Alloy Liquid - Blue / Red
PRODUCT CODE: Ceramic Alloy Liquid Blue / Red - Hardener

MANUFACTURER

Reparex, Inc.
 5058 Center Drive
 Latrobe, PA 15650
Customer Service: 724-537-0444

24 HR. EMERGENCY TELEPHONE NUMBERS

INFOTRAC
 1-352-323-3500 (International)
 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
 Skin Corrosion, Category 1B
 Serious Eye Damage, Category 2
 Chronic Hazards to the Aquatic Environment, Category 3
 Skin Sensitization, Category 1
 Reproductive Toxicity, Category 2

Environmental:

Aquatic Acute, Category 1
 Aquatic Chronic, Category 1

GHS LABEL



Corrosion



Environment



Health
hazard



Exclamation
mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H302: Harmful if swallowed.
 H312: Harmful in contact with skin.
 H314: Causes severe skin burns and eye damage.
 H316: Causes mild skin irritation.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H332: Harmful if inhaled.
 H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
 H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P202: Do not handle until all safety precautions have been read and understood.
 P233: Keep container tightly closed.

P270: Do not eat, drink or smoke when using this product.

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

P363: Wash contaminated clothing before reuse.

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313: Get medical advice/attention.

Storage:

P404: Store in a closed container.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Grey gritty paste

IMMEDIATE CONCERNS: Substance may be harmful if swallowed. May cause vomiting. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness). Contact may cause eye irritation. Prolonged or repeated contact may cause skin irritation.

POTENTIAL HEALTH EFFECTS

EYES: Serious eye damage/eye irritation

SKIN: Skin corrosion/irritation

SKIN ABSORPTION: May be absorbed through skin with prolonged and widespread contact.

INGESTION: Harmful if swallowed. May cause vomiting. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause cardiovascular disorder and damage.

INHALATION: Prolonged or repeated exposure to fumes or mists may cause irritation.

MEDICAL CONDITIONS AGGRAVATED: Breathing problems, skin problems.

ROUTES OF ENTRY: Inhalation, ingestion, eyes, skin.

TARGET ORGAN STATEMENT: Respiratory system, lungs, skin, eyes.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
4-nonylphenol, Branched	40 - 45	84852-15-3
Aluminum Oxide	30 - 35	1344-28-1
Iron	15 - 20	7439-89-6
Chromium	5 - 10	7440-47-3
fatty acids, c18-unsatd., dimers, reaction products with polyethylenepolyamines	5 - 10	68410-23-1
3,6-diazaoctanethylenediamine	1 - 5	112-24-3
formaldehyde, polymer with n1,n2-bis(2-aminoethyl)-1,2-ethanediamine and phenol	1 - 5	32610-77-8
Polydimethylsiloxane, Silica Adduct	1 - 5	67762-90-7
Titanium Dioxide	1 - 5	13463-67-7
Phenol	0.1 - 1	108-95-2
Formaldehyde	0.1 - 1	50-00-0

COMMENTS: Exact percentages of ingredients are proprietary and are withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove to fresh air. Oxygen or artificial respiration if needed. Call a physician if you feel unwell.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Treat symptoms

SKIN: Treat symptoms

SKIN ABSORPTION: Treat symptoms

INGESTION: Treat symptoms

INHALATION: Treat symptoms

ACUTE TOXICITY: Corrosive to eyes, skin and mucous membranes, which can result in strong irritation, burning and tissue damage. High vapor concentrations can cause severe eye and respiratory tract irritation, coughing and labored breathing. Prolonged or repeated contact may cause asthma, skin sensitization and other allergic responses.

NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray (fog). Carbon dioxide (CO₂). Dry chemical. Foam.

EXPLOSION HAZARDS: None Expected.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus operated in pressure-demand mode, (NIOSH approved or equivalent) and full protective gear.

FIRE FIGHTING EQUIPMENT: Carbon Dioxide, dry chemical or foam

FIRE EXPLOSION: None Expected.

SENSITIVE TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb spilled material and place in appropriate container for disposal.

LARGE SPILL: Use same methods described for small spills.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Keep out of sewers, streams and waterways.

SPECIAL PROTECTIVE EQUIPMENT: Refer to Section 8, Exposure Control/Personal Protection.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace.

HANDLING: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Use personal protection recommended in Section 8. Avoid breathing dust or fume. Contaminated work clothing should not be allowed out of the workplace.

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

STORAGE TEMPERATURE: 15°C (60°F) Minimum to 30°C (85°F) Maximum

SHELF LIFE: 1 Year

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Aluminum Oxide	TWA	[1]	15 T, [1]				
	STEL			10			
Chromium	TWA		1		0.5		
Titanium Dioxide	TWA		15 T		10	NL	NL
	STEL					NL	NL
Phenol	TWA	5	19	5	19	NL	NL
	STEL					NL	NL
Formaldehyde	TWA	0.75				NL	NL
	STEL	2				NL	NL
Footnotes: 1. 5 mg/m ³ respirable							

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. Chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent) are recommended.

SKIN: Coveralls or work clothes covering skin. Rubber gloves.

RESPIRATORY: Not normally needed if used in well ventilated area. In case of insufficient ventilation, wear suitable respiratory equipment.

PROTECTIVE CLOTHING: Impervious clothing as necessary to prevent skin contact.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Ammonia

APPEARANCE: Smooth Thick Gritty Paste

COLOR: Charcoal Grey

pH: Not Determined

PERCENT VOLATILE: None known.

FLASH POINT AND METHOD: > 249°C (480°F)

Notes: Closed Container

AUTOIGNITION TEMPERATURE: > 249°C (480°F)

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: Not Determined

FREEZING POINT: Not Determined

MELTING POINT: Not Determined

POUR POINT: Not Determined

THERMAL DECOMPOSITION: Not Determined

SOLUBILITY IN WATER: Slight

EVAPORATION RATE: Not Determined

DENSITY: Not Determined

SPECIFIC GRAVITY: 2.2

VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined

10. STABILITY AND REACTIVITY

REACTIVITY: No

STABILITY: Stable

CONDITIONS TO AVOID: Extreme heat.

POSSIBILITY OF HAZARDOUS REACTIONS: Not reactive under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: When product burns it may form toxic materials such as carbon dioxide, carbon monoxide, various hydrocarbons, etc.

INCOMPATIBLE MATERIALS: Strong oxidizing agents. Acids. Bases. Amines.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀	DERMAL LD ₅₀
4-nonylphenol, Branched	1300 mg/kg (Rat)	3160 mg/kg (Rabbit)
fatty acids, c18-unsatd., dimers, reaction products with polyethylenepolyamines	> 5000 mg/kg body weight	
3,6-diazaoctanethylenediamine	2500 mg/kg (Rat)	805 mg/kg (Rabbit)
Polydimethylsiloxane, Silica Adduct	> 5000 mg/kg (Rat)	
Titanium Dioxide	> 10.000 mg/kg (Rat)	> 10.000 mg/kg (Rat)
Phenol	270 mg/kg (Mouse)	630 mg/kg (Rabbit)

EYE EFFECTS: Causes serious eye irritation.

SKIN EFFECTS: Causes skin irritation. May cause an allergic skin reaction.

CHRONIC: Prolonged or repeated contact may cause asthma, skin sensitization and other allergic responses.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Chromium		3	
Titanium Dioxide		2B	
Phenol		3	
Formaldehyde	1	1	X

Notes: The materials in this product do not separate from the mixture or in of themselves become airborne, therefore do not present a hazard in normal use.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Not Determined

BIOACCUMULATION/ACCUMULATION: Not Determined

AQUATIC TOXICITY (ACUTE): Many aquatic species are intolerant to corrosive material such as the unreacted curing agent.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this product in accordance with all applicable local, state and federal regulations.

PRODUCT DISPOSAL: Combine resin and curative. The final cured material is considered nonhazardous. Landfill sealed containers with stabilized and solidified liquids in an approved area. May be incinerated at an appropriate facility. Unreacted components are a special waste. Check local, state and national/federal regulations and comply with the most stringent requirement.

EMPTY CONTAINER: Disposal should be in accordance with applicable regional, national and local laws and regulations.

EUROPEAN WASTE CATALOGUE: 08 04 09

GENERAL COMMENTS: Combine resin and curative. The final cured material is considered nonhazardous. Landfill sealed containers with stabilized and solidified liquids in an approved area. May be incinerated at an appropriate facility. Unreacted components are a special waste. Check local, state and national/federal regulations and comply with the most stringent requirement.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Amines, solid, corrosive, N.O.S. (3,6-diazaoctanethylenediamine, Phenol)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 3259

PACKING GROUP: III

U.S. SURFACE FREIGHT CLASS: 55

PLACARDS: Corrosive Class 8

LABEL: Class 8

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Amines, solid, corrosive, N.O.S. (3,6-diazaoctanethylenediamine, Phenol)

UN NUMBER: 3259

HAZARD CLASS: 8

PACKING GROUP: III

SPECIAL PROVISIONS: No special precautions.

LABEL: Class 8

AIR (ICAO/IATA)

SHIPPING NAME: Amines, solid, corrosive, N.O.S. (3,6-diazaoctanethylenediamine, Phenol)

UN/NA NUMBER: 3259

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

PLACARDS: Corrosive Class 8

LABEL: Class 8

VESSEL (IMO/MDG)

SHIPPING NAME: Amines, solid, corrosive, N.O.S. (3,6-diazaoctanethylenediamine, Phenol)

UN/NA NUMBER: 3259

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

PLACARDS: Corrosive Class 8

LABEL: Class 8

SPECIAL PROVISIONS: No special precautions.

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Amines, solid, corrosive, N.O.S. (3,6-diazaoctanethylenediamine, Phenol)

UN/NA NUMBER: 3259

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

PLACARDS: Corrosive Class 8

LABEL: Class 8

COMMENTS: US DOT: ERG NO. 154 May be shipped as Limited Quantities in packaging having a rated capacity gross weight of 66 lb. or less and in inner packages not over 5 kg (49 CFR 173.154 (b,2))

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate & Delayed

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Aluminum Oxide	30 - 35	1344-28-1
Chromium	5 - 10	7440-47-3
Formaldehyde	0.1 - 1	50-00-0

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Chromium	5 - 10	5,000
Phenol	0.1 - 1	1,000
Formaldehyde	0.1 - 1	100

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
4-nonylphenol, Branched	84852-15-3
Aluminum Oxide	1344-28-1
Iron	7439-89-6
Chromium	7440-47-3
fatty acids, c18-unsatd., dimers, reaction products with polyethylenepolyamines	68410-23-1
3,6-diazaoctanethylenediamine	112-24-3
formaldehyde, polymer with n1,n2-bis(2-aminoethyl)-1,2-ethanediamine and phenol	32610-77-8
Polydimethylsiloxane, Silica Adduct	67762-90-7
Titanium Dioxide	13463-67-7
Phenol	108-95-2

Formaldehyde	50-00-0
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CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Formaldehyde	0.1 - 1	50-00-0

CALIFORNIA PROPOSITION 65: WARNING: Contains chemical(s) known by the State of California to cause cancer.

Chemical Name	Wt.%	Listed
Formaldehyde	0.1 - 1	Cancer

CANADA**WHMIS HAZARD SYMBOL AND CLASSIFICATION**

Corrosive



Toxic

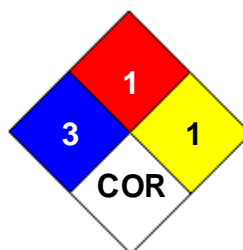
16. OTHER INFORMATION

PREPARED BY: Shani Vagnon-Hull

Date Prepared: 05/14/2015

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		1
PERSONAL PROTECTION	*	

NFPA CODES

HMIS RATINGS NOTES: * = Section 8

MANUFACTURER DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.