SAFETY DATA SHEET
502 Regular Cure Hardener- Part B

Printed: 04/29/2020
Revision: 04/29/2020
Supersedes Revision: 05/28/2019

1. Product and Company Identification

Product Code: 502-RCB

Product Name: 502 Regular Cure Hardener- Part B

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

Intended Use: Industrial floor coatings.

2. Hazards Identification

Skin Sensitization, Category 1A
Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Acute Toxicity: Oral, Category 4
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Skin, Category 4
Aquatic Toxicity (Acute), Category 1
Aquatic Toxicity (Chronic), Category 1

Warning **Danger** **Warning**

GHS Hazard Phrases:
H317 - May cause an allergic skin reaction.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H302 - Harmful if swallowed.
H332 - Harmful if inhaled.
H312 - Harmful in contact with skin.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

GHS Precaution Phrases:
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P281 - Use personal protective equipment as required.
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.

GHS Response Phrases:
P302+352 - IF ON SKIN: Wash with plenty of soap and water. P333+313 - If skin irritation or rash occurs, seek medical advice/attention. P363 - Wash contaminated clothing before reuse.
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. P314 - Get medical attention/advice if you feel unwell.
P391 - Collect spillage.

GHS Storage and Disposal Phrases: P501 - Dispose of contents/container to local, state, and federal authority requirements. P405 - Store locked up.

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

Potential Health Effects (Acute and Chronic): Corrosive to eyes and skin. Causes burns. May be harmful if swallowed. Irritating to respiratory system. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Inhalation: Corrosive to respiratory tract. May cause respiratory sensitization.

Skin Contact: Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Eye Contact: Corrosive/irritation to eyes. Causes eye burns.

Ingestion: Harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Medical Conditions Generally Aggravated By Exposure: Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	
NA	(Trade Secret)	35 - 40 %	
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	20 - 30 %	
84852-15-3	Phenol, 4-nonyl-, branched	15 - 30 %	
100-51-6	Benzenemethanol	10 - 20 %	
112-57-2	Tetraethylenepentamine	5.0 - 10 %	
111-40-0	Diethylenetriamine	5.0 - 15 %	
80-05-7	4,4'-Isopropylidenediphenol	1.0 - 5.0 %	
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	1.0 - 5.0 %	

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. Get medical attention immediately.

In Case of Ingestion: If swallowed, wash out mouth with water provided person is conscious. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Get medical attention immediately.

Signs and Symptoms Of Exposure: Eyes: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Skin: Can cause severe skin burns. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Inhalation: Vapors are irritating to the respiratory system, may cause throat pain and cough.

5. Fire Fighting Measures

Flash Pt: > 200.00 F (93.3 C) Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data.

Suitable Extinguishing Media: CO_2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media: Do not use a direct water stream, which may spread fire.

Fire Fighting Instructions: Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Flammable Properties and Hazards: Combustible material: may burn but does not ignite readily.

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

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.

7. Handling and Storage

Precautions To Be Taken in Handling: Provide adequate ventilation. Wear all personal protection required in section 8.

Precautions To Be Taken in Storing: Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible material.

Other Precautions: Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	(Trade Secret)	No data.	No data.	No data.
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	No data.	No data.	No data.
84852-15-3	Phenol, 4-nonyl-, branched	No data.	No data.	No data.
100-51-6	Benzenemethanol	No data.	No data.	No data.
112-57-2	Tetraethylenepentamine	No data.	No data.	No data.
111-40-0	Diethylenetriamine	No data.	TLV: 1 ppm	No data.
80-05-7	4,4'-Isopropylidenediphenol	No data.	No data.	No data.
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	No data.	No data.	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.
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.

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Odor: amine-like. Appearance: Liquid. amber.
Melting Point:	NE
Boiling Point:	NE
Decomposition Temperature:	NE
Autoignition Pt:	No data.
Flash Pt:	> 200.00 F (93.3 C) Method Used: Pensky-Marten Closed Cup
Explosive Limits:	LEL: NE UEL: NE
Specific Gravity (Water = 1):	~ .9952 - 1.00
Density:	~ 8.3 - 8.35 LB/GL
Vapor Pressure (vs. Air or mm Hg):	NE
Vapor Density (vs. Air = 1):	NE
Evaporation Rate:	NE
Solubility in Water:	Soluble
Saturated Vapor Concentration:	NE
pH:	~ 11
Percent Volatile:	N.A.
VOC / Volume:	NP

10. Stability and Reactivity

Reactivity:	Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Nitrous acid and other nitrosating agents. Materials reactive with hydroxyl compounds. Oxidizing agents.
Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Extreme temperatures.
Incompatibility - Materials To Avoid:	Avoid strong acids, bases, and oxidizing agents.
Hazardous Decomposition Or Byproducts:	Nitrogen oxides, Phenolics. Carbon monoxide, Carbon dioxide, Ammonia. Aldehydes.
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.
Irritation or Corrosion:	Corrosive! Damages skin and eyes.
Symptoms related to Toxicological Characteristics:	Skin: Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Eyes: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Permanent eye damage including blindness could result. Inhalation: Inhalation of vapors/fumes causes respiratory irritation with throat discomfort, coughing or difficulty breathing.
Chronic Toxicological Effects:	Skin sensitization.

12. Ecological Information

General Ecological Information:	Avoid release to the environment. Do not empty into drains. 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: CAUSTIC ALKALI LIQUID, N.O.S. (Modified Amido Amine) (Nonylphenol) MARINE POLLUTANT.

Marine Pollutant(s): Nonylphenol.

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: 8 CORROSIVE

UN/NA Number: UN1719 **Packing Group:** III

Precautionary Label: Corrosive! Damages skin and eyes. 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: CAUSTIC ALKALI LIQUID, N.O.S. (Modified Amido Amine) (Nonylphenol)

Marine Pollutant(s): Nonylphenol.

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: 1719 **Packing Group:** III

Hazard Class: 8 - CORROSIVE

IMDG EMS Number: FA,SB **IMDG MFAG Number:**

IMDG EMS Page: Yes

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S. (Modified Amido Amine) (Nonylphenol) MARINE POLLUTANT.

Marine Pollutant(s): Nonylphenol.

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)
NA	(Trade Secret)	No	No	No
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	No	No	No
84852-15-3	Phenol, 4-nonyl-, branched	No	No	No
100-51-6	Benzenemethanol	No	No	No
112-57-2	Tetraethylenepentamine	No	No	No

111-40-0	Diethylenetriamine	No	No	No
80-05-7	4,4'-Isopropylidenediphenol	No	No	Yes
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[X] Yes [ ] No Acute (immediate) Health Hazard
[X] Yes [ ] No Chronic (delayed) Health Hazard
[ ] Yes [X] No Fire Hazard
[ ] Yes [X] No Sudden Release of Pressure Hazard
[ ] Yes [X] No Reactive Hazard

16. Other Information

Revision Date: 04/29/2020

Hazard Rating System:

HMIS:

HEALTH	3
FLAMMABILITY	1
PHYSICAL	0
PPE	X

Additional Information About This Product: 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.