Page: 1 Printed: 08/14/2019 Revision: 08/14/2019

Supersedes Revision: 04/30/2015

+1 (513)943-4225

1. Product and Company Identification

Product Code: 502-FCB

**Product Name:** 502 Fast Cure Hardener- Part B **Trade Name:** 502 Fast Cure Hardener- Part B

Company Name: Key Resin Company Phone Number:

4050 Clough Woods Dr.

Batavia, OH 45103

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

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

#### 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





Warning

**Danger** 

GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H302 - Harmful if swallowed. H332 - Harmful if inhaled.

GHS Precaution Phrases: P281 - Use personal protective equipment as required.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

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

P264 - Wash hands thoroughly after handling.

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

GHS Response Phrases: P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

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

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

comfortable for breathing.

P309+311 - Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

**GHS Storage and Disposal** 

Phrases:

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

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

Page: 2 Printed: 08/14/2019 Revision: 08/14/2019

Supersedes Revision: 04/30/2015

Potential Health Effects Corrosive to eyes and skin. Causes burns. May be harmful if swallowed. Irritating to

(Acute and Chronic): 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** Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

Aggravated By Exposure:

## 3. Composition/Information on Ingredients

CAS#	Hazardous Components (Chemical Name)	Concentration
84852-15-3	Phenol, 4-nonyl-, branched	45 - 55 %
111-40-0	Diethylenetriamine	10 - 20 %
100-51-6	Benzenemethanol	1.0 - 10 %
80-05-7	4,4'-Isopropylidenediphenol	1.0 - 10 %
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	1.0 - 10 %
112-57-2	Tetraethylenepentamine	1.0 - 10 %
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	1.0 - 10 %

#### 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.

Printed: 08/14/2019 Revision: 08/14/2019

Page: 3

Supersedes Revision: 04/30/2015

5. Fire Fighting Measures

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

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

Autoignition Pt: No data.

Suitable Extinguishing Media: CO2, dry chemical, dry sand, alcohol-resistant 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:

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

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Material Is Released Or Spilled:

area.

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

## 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.

Wash thoroughly after handling. Other Precautions:

## 8. Exposure Controls/Personal Protection

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

Licensed to Key Resin Company: MIRS MSDS, (c) A V Systems, Inc.

**GHS** format

Printed: 08/14/2019 Revision: 08/14/2019

Page: 4

Supersedes Revision: 04/30/2015

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

(Ventilation etc.): and eye bath.

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

**Practices:** 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:

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):** ~ .9832 - .9892 **Density:** ~ 8.2 - 8.25 LB/GL

Vapor Pressure (vs. Air or

mm Hg):

NE

NE

Vapor Density (vs. Air = 1): NE
Evaporation Rate: NE
Solubility in Water: Soluble

Saturated Vapor Concentration:

Percent Volatile: 0.0 % by weight.

VOC / Volume: NP

## 10. Stability and Reactivity

**Reactivity:** Avoid: acids, alkalis, oxidizing agents.

Stability: Unstable [ ] Stable [ X ]

**Conditions To Avoid -** Extreme temperatures.

Instability:

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

Avoid:

Hazardous Decomposition Or Nitrogen oxides, Phenolics. Carbon monoxide, Carbon dioxide, Ammonia. Aldehydes.

Byproducts:

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

Polymerization:

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

Hazardous Reactions:

Licensed to Key Resin Company: MIRS MSDS, (c) A V Systems, Inc.

**GHS** format

Printed: 08/14/2019 Revision: 08/14/2019

Page: 5

Supersedes Revision: 04/30/2015

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 Avoid release to the environment. Do not empty into drains. May be hazardous to the

**Information:** environment if released in large quantities.

Results of PBT and vPvB

assessment:

No data available.

Persistence and

Not readily biodegradable.

Degradability:

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, NOS (Modified Amido Amine)(Nonyl phenol), 8, Packing group

III.

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.

**DOT Hazard Class:** 8 CORROSIVE

UN1719 Packing Group:

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.



Page: 6 Printed: 08/14/2019 Revision: 08/14/2019

Supersedes Revision: 04/30/2015

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Caustic Alkali Liquid, NOS (Modified Amido Amine)(Nonyl phenol), 8, Packing group

III.

Marine Pollutant(s): Nonylphenol.

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, NOS (Modified Amido Amine)(Nonyl phenol), 8, Packing group

III.

# 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)
84852-15-3	Phenol, 4-nonyl-, branched	No	No	No
111-40-0	Diethylenetriamine	No	No	No
100-51-6	Benzenemethanol	No	No	No
80-05-7	4,4'-Isopropylidenediphenol	No	No	Yes
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	No	No	No
112-57-2	Tetraethylenepentamine	No	No	No
90-72-2	2,4,6-Tris(Dimethylaminomethyl)Phenol	No	No	No

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

Page: 7 Printed: 08/14/2019 Revision: 08/14/2019 Supersedes Revision: 04/30/2015

16. Other Information

08/14/2019 Revision Date:

**Hazard Rating System:** 

**HEALTH FLAMMABILITY PHYSICAL** 0 **PPE** Х

HMIS:

This Product:

Additional Information About 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.

Licensed to Key Resin Company: MIRS MSDS, (c) A V Systems, Inc.

**GHS** format