

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

## 1. Product and Company Identification

**Product Code:** 540-LPLB  
**Product Name:** 540 Long Pot Life Hardener (LPL) - Part B  
**Trade Name:** 540 Long Pot Life Hardener (LPL) - 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

**Acute Toxicity: Inhalation, Category 4**  
**Acute Toxicity: Oral, Category 4**  
**Acute Toxicity: Skin, Category 4**  
**Skin Corrosion/Irritation, Category 1B**  
**Serious Eye Damage/Eye Irritation, Category 1**  
**Specific Target Organ Toxicity (single exposure), Category 3**  
**Aquatic Toxicity (Acute), Category 1**  
**Aquatic Toxicity (Chronic), Category 1**



Warning



Danger



Warning

**GHS Hazard Phrases:** H332 - Harmful if inhaled.  
 H302 - Harmful if swallowed.  
 H312 - Harmful in contact with skin.  
 H314 - Causes severe skin burns and eye damage.  
 H335 - May cause respiratory irritation.  
 H410 - Very toxic to aquatic life with long lasting effects.

**GHS Precaution Phrases:** P271 - Use only outdoors or in a well-ventilated area.  
 P261 - Avoid breathing gas/mist/vapors/spray.  
 P270 - Do not eat, drink or smoke when using this product.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P273 - Avoid release to the environment.

**GHS Response Phrases:** 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.  
 P302+352 - IF ON SKIN: Wash with plenty of soap and water. P363 - Wash contaminated clothing before reuse. P332+313 - If skin irritation occurs, get medical advice/attention.  
 P305+351+338 - 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.  
 P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310 - Immediately call a POISON CENTER or doctor/physician.

**GHS Storage and Disposal Phrases:** P501 - Dispose of contents/container to local, state, and federal authority requirements.  
 P403+235 - Store in cool/well-ventilated place. P405 - Store locked up.

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

<b>OSHA Regulatory Status:</b>	This material is classified as hazardous under OSHA regulations.
<b>Potential Health Effects (Acute and Chronic):</b>	May cause skin irritation or burns. May cause respiratory tract irritation. Can cause severe eye irritation.
<b>Inhalation:</b>	Can cause severe respiratory irritation.
<b>Skin Contact:</b>	Causes skin burns, irritation and possible allergic reaction.
<b>Eye Contact:</b>	Corrosive/irritation to eyes. Causes eye burns.
<b>Ingestion:</b>	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. Aspiration hazard if swallowed. Can enter lungs and cause damage.
<b>Medical Conditions Generally Aggravated By Exposure:</b>	Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	
14808-60-7	Quartz	20 - 30 %	
84852-15-3	Phenol, 4-nonyl-, branched	20 - 30 %	
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	5.0 - 15 %	
68953-36-6	Fatty acids, tall-oil, reaction products with diethylenetriamine, di-Me sulfate and propyleneoxide	5.0 - 15 %	
112-57-2	Tetraethylenepentamine	5.0 - 15 %	
872-50-4	N-Methyl-2-pyrrolidone	1.0 - 10 %	
112945-52-5	Silica, amorphous treated	1.0 - 10 %	

### 4. First Aid Measures

#### Emergency and First Aid

##### Procedures:

<b>In Case of Inhalation:</b>	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.
<b>In Case of Skin Contact:</b>	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.
<b>In Case of Eye Contact:</b>	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.
<b>In Case of Ingestion:</b>	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.

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

## 5. Fire Fighting Measures

<b>Flash Pt:</b>	> 200.00 F (93.3 C)	Method Used: Pensky-Marten Closed Cup
<b>Explosive Limits:</b>	LEL: NE	UEL: NE
<b>Autoignition Pt:</b>	No data.	
<b>Suitable Extinguishing Media:</b>	CO2, dry chemical, dry sand, alcohol-resistant foam.	
<b>Unsuitable Extinguishing Media:</b>	Do not use a direct water stream, which may spread fire.	
<b>Fire Fighting Instructions:</b>	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.	
<b>Flammable Properties and Hazards:</b>	Combustible material: may burn but does not ignite readily.	

## 6. Accidental Release Measures

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.
<b>Environmental Precautions:</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	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

<b>Precautions To Be Taken in Handling:</b>	Provide adequate ventilation. Wear all personal protection required in section 8.
<b>Precautions To Be Taken in Storing:</b>	Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible material.
<b>Other Precautions:</b>	Read product SDS and all labels before use. Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

## 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
14808-60-7	Quartz	PEL: 8825 ppm/(%SiO <sub>2</sub> +5)	TLV: 0.05 mg/m <sup>3</sup> (R)	No data.
84852-15-3	Phenol, 4-nonyl-, branched	No data.	No data.	No data.
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	No data.	No data.	No data.
68953-36-6	Fatty acids, tall-oil, reaction products with diethylenetriamine, di-Me sulfate and propyleneoxide	No data.	No data.	No data.
112-57-2	Tetraethylenepentamine	No data.	No data.	No data.
872-50-4	N-Methyl-2-pyrrolidone	No data.	No data.	No data.
112945-52-5	Silica, amorphous treated	No data.	No data.	No data.

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

<b>Respiratory Equipment (Specify Type):</b>	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.
<b>Eye Protection:</b>	Safety glasses, or goggles.
<b>Protective Gloves:</b>	Nitrile rubber and Neoprene are recommended.
<b>Other Protective Clothing:</b>	Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.
<b>Engineering Controls (Ventilation etc.):</b>	Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.
<b>Work/Hygienic/Maintenance Practices:</b>	Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.
<b>Environmental Exposure Controls:</b>	Avoid runoff into storm sewers and ditches which lead to waterways.

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Appearance and Odor:</b>	Odor: amine-like. Appearance: Liquid. amber.
<b>Melting Point:</b>	NE
<b>Boiling Point:</b>	NE
<b>Decomposition Temperature:</b>	NE
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	> 200.00 F (93.3 C) Method Used: Pensky-Marten Closed Cup
<b>Explosive Limits:</b>	LEL: NE UEL: NE
<b>Specific Gravity (Water = 1):</b>	~ 1.205
<b>Density:</b>	~ 10.05 LB/GL
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NE
<b>Vapor Density (vs. Air = 1):</b>	NE
<b>Evaporation Rate:</b>	NE
<b>Solubility in Water:</b>	No data.
<b>Solubility Notes:</b>	Slightly Soluble.
<b>Saturated Vapor Concentration:</b>	NE
<b>Percent Volatile:</b>	N.A.
<b>VOC / Volume:</b>	NP

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

### 10. Stability and Reactivity

<b>Reactivity:</b>	Avoid: acids, alkalis, oxidizing agents.
<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	Extreme temperatures.
<b>Incompatibility - Materials To Avoid:</b>	Avoid: acids, alkalis, oxidizing agents.
<b>Hazardous Decomposition Or Byproducts:</b>	Carbon dioxide, Carbon monoxide, Nitrogen oxides, aldehydes. nitrosamines. ammonia.
<b>Possibility of Hazardous Polymerization:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	Will not undergo hazardous polymerization in normal storage conditions.

### 11. Toxicological Information

<b>Toxicological Information:</b>	May cause sensitization by skin contact.
<b>Irritation or Corrosion:</b>	Corrosive! Damages skin and eyes.
<b>Symptoms related to Toxicological Characteristics:</b>	<p>Skin: Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.</p> <p>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.</p> <p>Inhalation: Inhalation of vapors/fumes causes respiratory irritation with throat discomfort, coughing or difficulty breathing.</p>
<b>Sensitization:</b>	May cause sensitization by skin contact.
<b>Chronic Toxicological Effects:</b>	No data available.

### 12. Ecological Information

<b>General Ecological Information:</b>	Avoid release to the environment. Do not empty into drains. May be hazardous to the environment if released in large quantities.
<b>Results of PBT and vPvB assessment:</b>	No data available.
<b>Persistence and Degradability:</b>	Not readily biodegradable.
<b>Bioaccumulative Potential:</b>	No data available.
<b>Mobility in Soil:</b>	not reported, unknown.

### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	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.

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.

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 **Marine Pollutant:** Yes

**AIR TRANSPORT (ICAO/IATA):**

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

### 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)
14808-60-7	Quartz	No	No	No
84852-15-3	Phenol, 4-nonyl-, branched	No	No	No
135108-88-2	Formaldehyde, polymer with benzenamine, hydrogenated	No	No	No
68953-36-6	Fatty acids, tall-oil, reaction products with diethylenetriamine, di-Me sulfate and propyleneoxide	No	No	No
112-57-2	Tetraethylenepentamine	No	No	No
872-50-4	N-Methyl-2-pyrrolidone	No	No	Yes
112945-52-5	Silica, amorphous treated	No	No	No

## 540 Long Pot Life Hardener (LPL) - Part B

Printed: 03/23/2016

Revision: 05/27/2015

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

**Regulatory Information:** SARA Section 311/312: Acute, Chronic Health Hazard.

### 16. Other Information

**Revision Date:** 05/27/2015

**Hazard Rating System:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL</b>	<b>0</b>
<b>PPE</b>	<b>X</b>

**HMIS:**

**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.