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1. Product and Company Identification				
Product Code:	644-RCB			
Product Name:	644 Chemical Resistant Epoxy Wall Coating Hardener Part B			
Trade Name:	644 Chemical Resistant Epoxy Wall Coating Hardener Part B			
Manufacturer Information				
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		
Alternate Emergency Contact:	Chemtrec (International)	+1 (703)527-3887		
Intended Use:	Industrial floor coatings.			

2. Hazards Identification

GHS Classification	Placard	Key word	GHS hazard phrase
Skin Sensitization, Category 1A	Exclamation point	Warning	May cause an allergic skin reaction
Skin Corrosion/Irritation, Category 1B	Corrosive	Danger	Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation, Category 1	Corrosive	Danger	Causes serious eye damage
Acute Toxicity: Oral, Category 4	Exclamation point	Warning	Harmful if swallowed
Aquatic Toxicity (Acute), Category 1	Pollution	Warning	Very toxic to aquatic life
Aquatic Toxicity (Chronic), Category 1	Pollution	Warning	Very toxic to aquatic life with long lasting effects

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.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

GHS Precaution Phrases

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

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

P362+364 - Take off contaminated clothing and wash it before reuse.

P273 - Avoid release to the environment.

GHS Response Phrases

P361 - Remove/Take off immediately all contaminated clothing.

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P333+313 - If skin irritation or rash occurs, seek 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. P337+313 - If eye irritation persists, get medical advice/attention.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P313 - Get medical advice/attention.

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.

Potential Health Effects (Acute and Chronic)

Corrosive! Damages skin and eyes.

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

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.

Inhalation

May cause respiratory irritation.

Skin Contact

Causes severe skin irritation. Causes skin burns.

Eye Contact

Corrosive/irritation to eyes. Causes eye burns.

Ingestion

Harmful if swallowed.

Recommended Exposure Limits

Not established.

Medical Conditions Generally Aggravated By Exposure

Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients			
Hazardous Components (Chemical Name)	CAS #	Concentration	
1. Isophoronediamine	2855-13-2	35 - 50 %	
2. Benzenemethanol	100-51-6	35 - 50 %	
3. Talcum	14807-96-6	15 - 25 %	
4. 1,5-Pentanediamine, 2-methyl-	15520-10-2	1.0 - 10 %	
5. Silica, amorphous treated	112945-52-5	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.

	5. Fire Fig	ghting Measure	es		
Flash Pt:		Method Used: Pensky			
Explosive Limits:	LEL: NE	UEL: NE			
Autoignition Pt:	No data availa	ıble.			
Fire Fighting Instructions					
Protective Equipment: Wear sel	f-contained breat	thing apparatus and pr	otective clothing to prevent of	contact with	
skin and eyes.					
Flammable Properties and Hazards					
Combustible material: may burn	h but does not ign	nite readily.			
Hazardous Combustion Products					
In a fire, product may produce t	he following: Ca	rbon monoxide, Carbo	on dioxide, Nitrogen oxides,	Fire may	
produce irritating, corrosive and	/or toxic gases.				
Suitable Extinguishing Media					
CO2, dry chemical, dry sand, al	cohol-resistant fo	bam.			
Unsuitable Extinguishing Media					
Do not use a direct water stream	h, which may spre	ead fire.			
6.	Accidenta	I Release Meas	sures		
Steps To Be Taken In Case Materia	I Is Released Or	· Spilled			
PROCEDURE TO BE FOLLO					
Absorb with sand or vermiculite	-	-			
Protective Precautions, Protective					
Wear respirator, chemical safety		-	ber gloves. Where splashing	is possible, fu	
chemically resistant protective of	lothing, and boo	ts are required.			
Environmental Precautions		C 1			
Prevent entry into waterways, so	ewers, basements	s or confined areas.			
	7. Handl	ing and Storag	е		
Hazard Label Information:					
-	not get on skin a	nd clothing. Avoid i	inhalation of vapor or mist.	Store in a	
closed container.					
Precautions To Be Taken in Handli	-				
Provide adequate ventilation. W		protection required in	section 8.		
Precautions To Be Taken in Storing			C · · · · · · · · · · · ·	. • 1	
Keep container tightly closed in	a dry and well-v	entilated place. Store	away from incompatible mai	terial.	
Other Precautions					
Wash thoroughly after handling					
		rols/Personal			
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limit	
 Isophoronediamine Benzenemethanol 	2855-13-2	No data. No data.	No data. No data.	No data. No data.	
2. Benzenemernanon 3. Talcum		706 ppm/20 mppcf	2 mg/m3 (non-asbestos)	No data. No data.	

15520-10-2 No data.

No data.

4. 1,5-Pentanediamine, 2-methyl-

No data.

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purifying respirat	ors 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.

SAFETY DATA SHEET

644 Chemical Resistant Epoxy Wall Coating

Hardener Part B OSHA PEL

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

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			
Melting Point:	NE			
Boiling Point:	NE			
Decomposition Temperature:	NE			
Autoignition Pt:	No data.			
Flash Pt:	> 200.00 F Method Used: Pensky-Marten Closed Cup			
Explosive Limits:	LEL: NE UEL: NE			
Specific Gravity (Water = 1):	~ 1.164			
Density:	~ 9.71 LB/GL			
Vapor Pressure (vs. Air or mm Hg):	NE			
Vapor Density (vs. Air = 1):	NE			
Evaporation Rate:	NE			
Solubility in Water:	Soluble			
Percent Volatile:	N.A.			
VOC / Volume:	NP			
HAP / Volume:	NP			
Saturated Vapor Concentration:	NE			

Hazardous Components (Chemical Name)

5. Silica, amorphous treated

Protective Equipment Summary - Hazard Label Information:

Neoprene gloves Safety glasses, or goggles. Impervious clothing.

CAS #

112945-52-5 No data.

Chemical resistant boots

Respiratory Equipment (Specify Type)

ACGIH TLV

No data.

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Other Limits

No data

Appearance and Odor

Odor: amine-like. Appearance: Liquid. amber.

	10. Stabili	ty and F	Reactivity		
	Unstable []	Stable [
Reactivity					
Avoid: acids, Avoid uncontrolled	contact with is	ocyanates.	Avoid: Uncontrol	led reactions with o	epoxies.
Conditions To Avoid - Instability		2			•
Extreme temperatures.					
Incompatibility - Materials To Avoid					
Avoid strong acids, bases, and oxi	dizing agents.				
Hazardous Decomposition Or Byprod	00				
Thermal decomposition may produce		bon monox	ide, carbon dioxid	le.	
	Will occur []		t occur [X]		
Polymerization:					
Conditions To Avoid - Hazardous Rea	actions				
Will not undergo hazardous polym	nerization in no	ormal storag	ge conditions.		
1′	1. Toxicol	ogical Ir	nformation		
Toxicological Information					
May cause sensitization by skin co	ontact.				
Chronic Toxicological Effects					
Skin sensitization.					
Irritation or Corrosion					
Corrosive! Damages skin and eyes	š.				
Symptoms related to Toxicological C	haracteristics	•			
May cause sensitization by skin co	ontact. May cau	use skin irri	tation or burns.		
Can cause eye irritation or burns.					
lazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
Isophoronediamine	2855-13-2	n.a.	n.a.	n.a.	n.a.
	100-51-6	n.a.	n.a.	n.a.	
. Benzenemethanol	100 01 0			11:4:	n.a.
. Benzenemethanol . Talcum	14807-96-6		n.a.	n.a.	n.a. n.a.
. Talcum . 1,5-Pentanediamine, 2-methyl-	14807-96-6 15520-10-2	n.a.	n.a. n.a.		
. Talcum . 1,5-Pentanediamine, 2-methyl-	14807-96-6	n.a.		n.a.	n.a.
. Talcum . 1,5-Pentanediamine, 2-methyl- . Silica, amorphous treated	14807-96-6 15520-10-2	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated 	14807-96-6 15520-10-2 112945-52-5	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated 	14807-96-6 15520-10-2 112945-52-5 12. Ecolo (n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information 	14807-96-6 15520-10-2 112945-52-5 12. Ecolo (n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities.	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities.	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities. Results of PBT and vPvB assessmen No data available. 	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities. Results of PBT and vPvB assessmen No data available. Persistence and Degradability 	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities. Results of PBT and vPvB assessmen 	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.
 Talcum 1,5-Pentanediamine, 2-methyl- Silica, amorphous treated General Ecological Information Avoid release to the environment. large quantities. Results of PBT and vPvB assessmen No data available. Persistence and Degradability Not readily biodegradable. 	14807-96-6 15520-10-2 112945-52-5 12. Ecolog Do not empty	n.a. n.a. gical Inf	n.a. n.a. ormation	n.a. n.a. n.a.	n.a. n.a. n.a.

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. (Contains Nonyl Phenol, Modified Cycloaliphatic Amines)
DOT Hazard Class:	8
DOT Hazard Label:	CORROSIVE
UN/NA Number:	UN1719
Packing Group:	III
Precautionary Label	Corrosive! Damages skin and eyes. May cause sensitization by skin contact. May be harmful if swallowed.
AIR TRANSPORT (ICAO/IATA)	
ICAO/IATA Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonyl Phenol, Modified Cycloaliphatic Amines)
UN Number:	1719
Hazard Class:	8 - CORROSIVE
Packing Group:	III
MARINE TRANSPORT (IMDG/IMO)	
IMDG/IMO Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonyl Phenol, Modified Cycloaliphatic Amines) MARINE POLLUTANT.
UN Number:	1719
Hazard Class:	8 - CORROSIVE
Packing Group:	III
IMDG EMS Number:	FA,SB
Marine Pollutant:	Yes
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15. Regulatory Information

US EPA SARA Title III

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Regulatory Information

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

16. Other Information

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.

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