

### **CITY OF GARDEN GROVE**

### FIRE DEPARTMENT

Tel: (714) 741-5600 Fax: (714) 741-5640

10/30/17

Chindamony Pak SCS Engineers

RE: Records Search for: 12662 & 12632 Monarch St., Garden Grove CA

Enclosed are the records found concerning the history of the above-mentioned site(s), especially as it pertains to fire code violation history, permits, the use, storage, or disposal of hazardous substances, and the installation or removal of underground flammable or combustible liquid storage tanks.

The City of Garden Grove Fire Department has utilized its best efforts to locate the records requested. However, the City makes no representation as to the accuracy of the records or that all records requested were retained or located. The City does not provide records on spills, leaks or clean-up, as that information is provided through the County of Orange Health Dept.

Sincerely,

Brad Spell

Fire Captain/Senior Fire Protection Specialist

### **GARDEN GROVE**



### FIRE DEPARTMENT

# HAZARDOUS MATERIALS DISCLOSURE PROGRAM

REPORTING FORMS PACKET

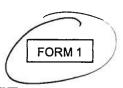
SHORT VERSION

FOR OFFICIAL USE ONLY
FACILITY ID NO. 8820
BUSINESS NAME Terrazzo & Marble Supply Co.
BUSINESS ADDRESS 12632 Monarch St #B
APPROVED BY G DATE 3911
NEW BUSINESS YES NO UPDATE
PICK 4D BUSLIST CALARP: CUPA: GIS
FEE



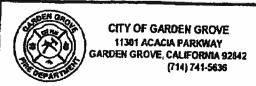
### CITY OF GARDEN GROVE FIRE DEPARTMENT

11301 Acacia Parkway, Garden Grove, CA 92842 (714) 741-5600 (714) 741-5636



Hazardous Materials Business Information Form

	Pa	ge of 3						
BUSINESS INFORMATION								
1	INNING DATE 1 1 0 7 / 200 8	ENDING DATE 2 12/3) /2008						
BUSINESS NAME Terrazzo è Marble Supply Company	A	BUSINESS PHONE 5.						
BUSINESS SITE ADDRESS	3	6						
CITY GARDEN GROVE	7 STATE 8 CA	9 92 84 1						
DUN & BRADSTREET 01-028-4206	SIC CODE (4 DIGIT #) 11	FIRE DISTRICT 12						
COUNTY ORANGE		13						
BUSINESS OPERATOR NAME James Bateman	14 OPERATOR'S PHO	ONE 15 901-1400						
BUSINESS OW	NER							
OWNER NAME Jody Rotondo	16	OWNER PHONE 17						
OWNER MAILING ADDRESS		18						
Wheeling	19 STATE 20	ZIP 60090 21						
ENVIRONMENTAL C	CONTACT							
CONTACT NAME	22	CONTACT PHONE 23						
CONTACT MAILING ADDRESS		24						
CITY	25 STATE 26	ZIP 27						
PRIMARY EMERGENCY CON	ITACTS	SECONDARY						
Chris Anderson 28 NAME	Tony Avila	33						
West Coast Regional Manager 29 TITLE	Warehouse Mai	19ger 34						
714-901- 1400	714-901-14							
24-HR. PHONE 31 24-HR. P		36						
N/A	N/A	37						
ADDITIONAL LOCALLY COLLEC	CTED INFORMATION							
BILLING ADDRESS (IF DIFFERENT FROM ABOVE)	<del></del>	TOTAL # OF EMPLOYEES 39						
BILLING ADDRESS (IF DIFFERENT FROM ABOVE)	- 40	Bojana Lalovic 41						
PROPERTY OWNER NAME Jody Rotondo 42 ADDRESS Wheeling		PHONE 44						
Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.								
SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	45	DATE 46						
NAME OF SIGNER (print) James Bateman 47 NAME O	F DOCUMENT PREPARER (print	Bateman 49						
West Coast Regional Manager w	F DOCUMENT PREPARER Lest Coest Regional	Manager 50						
Business Info Form 1 – 03/06/03		9						



### **CUPA**

FACILITY INFORMATION

### BUSINESS ACTIVITIES

				Page 3 of
30035	I. EPA ID#	(Hazardo	Sus W	(aske Only)
BUSINESS NAME (Same as FACILITY NAME or DBA-Doing Busine	r •			
Terrazzo & Marble Supply	Compa		•	
			9/1	
A CONTRACTOR OF THE PROPERTY OF THE PARTY OF		inty of the	lof	
pleases the property of the series of the se		SELETIC	<u>e</u> la	entitiestion baco.
Does your facility A. HAZARDOUS MATERIALS	If	Yes, ple	:ase	complete these pages of the UPCF
Have on site (for any purpose) hazardous materials at or above 5 gallons for liquids, 500 pounds for solids, or 200 cubic feet 6 compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or hand radiological materials in quantities for which an emergency plant required pursuant to 10 CFR Parts 30, 40 or 70?		□ мо	4.	✓ HAZARDOUS MATERIALS INVENTORY - CHEMICAL DESCRIPTION (Form 3)
B. UNDERGROUND STORAGE TANKS (USTs)				
Own or operate underground storage tanks?	YES	Мио	5.	✓ UST FACILITY (Formerly SWRC8 Form A)
2. Intent to upgrade existing or install new USTs?	☐ YES	⊠ NO	6.	✓ UST TANK (one per tank) ✓ UST INSTALLATION - CERTIFICATE OF
<u></u>				COMPLIANCE (one page per tank) (Formerly Form C)
3. Need to report closing a UST?  C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)	YES	NO	7.	✓ UST TANK (closure portion-one page per tank)
Own or operate ASTs above these thresholds:	'			
- any tank capacity is greater than 660 gallons, or - the total aggregate capacity for the entire facility (ASTs, drums and portable containers) greater than 1,320 gallons?  D. HAZARDOUS WASTE	☐ YES ]	⊠(no	8.	✓ NO FORM REQUIRED TO CUPAS
Generate hazardous waste?	☐ YES [	Мио	9.	✓ EPA ID NUMBER - provide at the top of this page
Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC §25143.2)?	YES		10.	✓ RECYCLABLE MATERIALS REPORT  (one per recycler)
3. Treat hazardous waste on site?	☐ YES \$	Дио		✓ ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Forms 1772) ✓ ONSITE HAZARDOUS WASTE TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772A,B,C,D and L)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Condition Authorization)?	TYES 5	₫no	12.	CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
5. Consolidate hazardous waste generated at a remove site?	TYES D	<b>(</b> 100 1	13.	REMOTE WASTE/CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)
Need to report the closure/removal of a lank that was classified waste and cleaned onsite?	☐ YES [2	QNO 1	14.	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)
E. LOCAL REQUIREMENTS			1	
Cal-ARP: California Accidental Release Prevention Program  H&SC Chapter 6.95, Article 2, §25531 et seq	☐ YES D	MNO 1	15.	REGULATED SUBSTANCE REPORTING FORM (Orange County CUPA)
<ul> <li>Stationary Source with more than a Threshold Quantity of a Regulated Substance in a Process</li> </ul>				•

## GARDEN GROVE FIRE DEPARTMENT HAZARDOUS MATERIALS DISCLOSURE PROGRAM BUSINESS EMERGENCY PLAN

#### **EMERGENCY NOTIFICATIONS:**

A handler of hazardous materials is required to immediately report any release or threatened release of hazardous materials to the Garden Grove Fire Department. Failure to do so may result in criminal and/or civil prosecution.

### **REQUIRED NOTIFICATIONS:**

In the event of a release or threatened release of hazardous materials, it is State law to notify each of the following agencies.

AGENCY			PHONE NUMBERS
Garden Grove Fire Department, Police, Paramedics			911
Office of Emergency Services	s (OES)		(800) 852-7550 or (916) 427-4341
National Response Center			(800) 424-8802
Individual responsible for calling these agencies:	James	Bateman	0

Provide the following information when you call:

- Name of the person and business
- Business street address
- Location of the incident
- Type of incident (spill, gas release, etc.)
- The name(s) of the chemical substance(s) involved
- The amount of the chemical substance(s) involved
- The extent of injuries, if any
- Possible hazards to human health and/or the environment
- Emergency call-back phone number (714) 901 1400

If a chemical spill or release at your facility could create a toxic cloud or a liquid stream that could drift beyond your facility, then, identify nearby facilities that could be in imminent danger.

To the North Facility Facility	Phone ( ) Phone ( )
To the South Facility Facility	Phone ( ) Phone ( )
To the East Facility Facility	Phone ( ) Phone ( )
To the West Facility Facility	Phone ( ) Phone ( )

# GARDEN GROVE FIRE DEPARTMENT HAZARDOUS MATERIALS DISCLOSURE PROGRAM BUSINESS EMERGENCY PLAN

### **OPTIONAL NOTIFICATIONS:**

1.	Hazardous Waste Contractor, Name: Affirmed Services	00) 400-6721
2.	Insurance Company Name: Flaggier Insurance (3)	12) 939-1515
3.	Poison Control Center – 24-Hour 1	(800) 876-4766
Eva	ACUATION PLANS AND PROCEDURES:  acuation Alarms - describe the type of alarm sign	als that will be used to start
an	evacuation at this facility (vocal, paging system, ma	
	Vocal- Only Two Employees. Not	ty other individual
	Exit the building at nearest	Exit. Multiple
	Exit Doors Located at North	and South end
	of building.	4
Ev	acuation Drills	

Evacuation drills and records proving you have held such drills are required by California law. The drill record does NOT have to be provided to the Fire Department with this business plan, but shall be maintained for a period of three years and shall be available for review by Fire Department personnel. The record shall include the facilitator's name, title, facility location, date of drill, and the signature of the facilitator. For your convenience, a form for recording list information is included with this packet. Make additional copies as needed.

The following four forms:

- A) Evacuation Drill Record
- B) Emergency Coordinator Task Completion Sheet
- C) Emergency Chemical Disclosure Form
- D) Training Record

These forms are designed to assist you in organizing, planning and maintaining permanent records. They are to be retained at the business, and may be requested by emergency responders upon their arrival or during your annual fire inspection.

## GARDEN GROVE FIRE DEPARTMENT EVACUATION DRILL RECORD

Business Name: Terrazzo & Marble Supply Co	ompany
Street Address: 12632 Monarch St. Unit	- B
Garden Grove, CA 928	H (
Date of Evacuation Drill:	
Brief Description of Drill:	
Facilitator's Name: Tony Avila	
Facilitator's Title: Ware house Manager	
I hereby certify, under penal the evacuation drill as descri	of perjury, that I facilitated ped above.
Signature of Facilitator:	
Date Signed:	
Date of Evacuation Drill:	
Brief Description of Drill:	1
Facilitator's Name:	
Facilitator's Title:	
I hereby certify, under penal the evacuation drill as descri	ty of perjury, that I facilitated bed above.
Signature of Facilitator:	
Date Signed:	

THIS RECORD TO BE RETAINED AT THE BUSINESS.
MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

### GARDEN GROVE FIRE DEPARTMENT BUSINESS EMERGENCY PLAN EVACUATION PLANNING

Describe the evacuation routes, emergency exits, and staging areas for employees in each work area at this facility. (A "staging area" is a specific location where your personnel meet after an evacuation, where you make sure everyone evacuated safely.)

1.	Working area: Warehouse - North End	
12	Evacuation route: Exit Emergency Door on we	st wall
	Emergency exits: 2	· · · · · · · · · · · · · · · · · · ·
	Staging area: North of Building	
2.	Working area: Ware house - South End	
	Evacuation route: Exit Overhead Door on So	uh wall
	Emergency exits: 2	
	Elliergency exits.	C
	Staging area: Parking Lot South of Ruildin	ð
3.	a 100	
J.	Evacuation route: Exit Front Door on So	uth of Building
		0
	Emergency exits: 2	
	Staging area: Parking Lot South of Ruild	ne
	Mayling 2001	
4.	Working area:	
	Evacuation route:	
	Emergency exits:	
	Staging area:	
5.	. Working area:	2
	Evacuation route:	
	Emergency exits:	
	Staging area:	
	Staying area.	

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

### **EMPLOYEE RESPONSIBILITIES:**

Every business is required to develop an emergency plan. Part of this plan shall include the pre-assignment of important emergency duties to specific employees, and training of employees to carry out these emergency duties. Provide this information below for those employees who will carry out the emergency duties:

JOB TITLE: West Coast Regional Managel	- James Bateman
EMERGENCY FUNCTION(S): Notify other Empl	ayee to Evacuate Building
a. Contact local authorities for pape	remergency
b. Contact Headquarters office to No	
с	
d	
JOB TITLE: Warehouse Manager - Tony	Avila
EMERGENCY FUNCTION(S): Notify ofther Emplo	vee to Evacuate Brilling
a. James to carry out AEB from	above responsibilities
b	
С.	
d	
( <del>20</del> 0) 11	
JOB TITLE:	
EMERGENCY FUNCTION(S):	
a	
b	
С.	
d	2.
	II

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

#### TRAINING:

Every business handling hazardous materials above the minimum limits shall provide training for their employees in the following area:

- A. Method for safe handling of hazardous materials.
- B. Procedures for notification and coordination with emergency agencies, in the event of a spill or threatened spill.
- C. Use of emergency response equipment and supplies under the control of the handler.
- D. Emergency mitigation procedures in response to a release or threatened release hazardous material.
- E. Tasks assigned to employees in the event of a hazardous materials emergency.
- F. Evacuation procedures.

Describe the type of training programs you either are currently using or will use during the next year to provide the required employee training.

- Every Employee required to comple	te OSHA Hozmat
Certification course.	r i
- Every Employee provided Emergency	contact list that
includes local Authorities, Haz mat	
- Evacuation procedures to be disa	Issed monthly with
quarterly evacuation drills.	
- Program developed by Mary Guzman	@ Ha. She is in change
of HR and will be main point	of contact far
employees. All employees will b	e given her contact
into.	<u> </u>
н .	
••	
II'	

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

#### **PREVENTION:**

Part of the emergency pre-planning process is to identify potential hazards BEFORE an emergency, then either eliminate the hazard (if feasible) or prepare to handle the hazard should an emergency occur. To help you in this task, the form below is designed to help you identify potential hazards and to plan for minimizing the hazard. Complete this information for each hazardous materials storage location within your facility.

STORAGE LOCATION	PREVENTATIVE MEASURE
1. Ruck #2	Hunde products w/ care
2	
3.	
4.	
5	
6	
7	
8.	
Comments relating to the listed storage areas	
All harandous product to be 6 bays of Rack #2 on t	Store in the first
6 bays of Rack #2 on +	he 1st & 2nd shelves.
Prevention measures to be taken at this	ocation
	1
Use (horion with no	endling these products
Estimated data of completions 12.6 [10	<b>%</b>
Estimated date of completion: $\frac{10 20 0}{10(28 0 0)}$ Actual date of completion: $\frac{10(28 0 0)}{10(28 0 0)}$	1
	i i
MAKE ADDITIONAL COPIES OF	THIS FORM AS NEEDED.

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

- 1. Change of business address.
- 2. Change of business ownership.
- Change of business name.
- 4. Cessation of business operation (quitting business).
- 5. Use or handling of a previously undisclosed hazardous material.
- 6. A 100% increase in the quantity of a previously disclosed hazardous material.

IN ADDITION, IF A BUSINESS HANDLES EXTREMELY (ACUTELY) HAZARDOUS MATERIALS, THE BUSINESS MUST NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

 A modification, change, or addition to your facility which either increases your usage of extremely hazardous materials by 10% or greater, or substantially increases the risk in handling extremely hazardous materials at that address.

Your business is required by State law to retain a copy of this entire Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your Disclosure and Emergency Business Plan will be kept.

File	Cabinet	in the	e office	real	west	wall.	Bottom
Draue	er far	(p++	hand	file -	folder.		
 15							

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I certify, under penalty of perjury, that the enclosed information is true and correct to the best of my knowledge.

Signature:		James Batte	
Name:	w	est Coast Regional M	igr.
Title:		James Bateman	
Date:		10/28/08	
	- 1	l e e e e e e e e e e e e e e e e e e e	

Page 30



August 28, 2009 Garden Grove Fire Department 11301 Acacia Parkway Garden Grove, CA 92840

Re: Updated Hazardous Material Disclosure

Dear Captain Janovick,

I have taken the following steps to accommodate the attached Hazardous Material Disclosure:

- Updated Form 3 of the Hazardous Materials Inventory form to accommodate new packaging.
- Purchased spill pallets & diatematious earth to assist in spill control.
- Placed appropriate placard on the outside of the facility.
- Updated Facility Map with new locations of additional product.

If you have any further questions or concerns regarding this matter please do not hesitate to contact me.

Best Regards,

James Bateman

West Coast Regional Manager



### **Hazardous Material Disclosure**

Business Information / Chemical Inventory / Business Emergency Plan





Date:

Address:/2632	MONARCH ERRAZZO + MAR		Date: _ File No:	4/11/09
Occupant or DBA: 7	PRAZZO + MAK	BLE		
Owner/Manager:			Phone:	714 901-1400
required to return the BEP p	Code, Section 6.95, you are required t acket, Hazardous Materials Disclosure nt. HazMat Coord. (714) 741-5636	o properly complete the Forms, and all materia	Business Emergency Il safety data sheets	Plan (BMP) packet. You are within fifteen (15) days to the
An inspection at the above lo	cation/occupancy revealed the	following violation(s)	):	
Violation(s): GAlifealth and Sal	ely Code Change 6.25%Alliele Lai	ō.Trile 19, \$2729 etsp	ee California Code	of Regulations (CGR)
Failure to submit a Business E Failure to review and/or revise Chemical inventory is incompl The Emergency Response P [HSC 25504(b)&(c)] Notification Procedures Mitigation Procedures Evacuation Procedures Employee Training Business Owner/Operator pag Failure to provide name, title, Site Map is incomplete or insu Failure to report a release or to Failure to report a change in b	hreatened release. [HSC 25507] usiness or chemical inventory within 30 in the quantity of a disclosed material undisclosed material tress nership	FC 8001.3.2 ired [HSC 25505(b)&(c)] 9] ess the following issues  [HSC 25509] act(s). [HSC 25509(a)(7)	and shall be immedia	
Other (See comments b	The same with the same of the same and the same of the			
Provide for secondary contains Provide spill control for hazard Provide approved cabinet if me Provide placarding and signs of the No Violations Found Additional Violations and/or No		d solids (CFC 8003.1.3.3 (CFC 7902.5) icle 80 §8001.7-8)	)	
- UDDALE HAZ	ARDOUS MATERIAL K	ACKEY FOR	NBT	wentory_
· 704 DIACARD	I of MITAGETICA DR	OCEDURES	ENI	of Month
Responsible Party	3	Re-inspectio	n Date: CAIL	when complete
lihe above are violations or calif	ofatile liktyreing treophiliekinnintedikitekeo	reation Faillure to co	rregistiolations is st	bject to civilipenalities
Fire Dept. Inspector:	WHAID QUOURK	ID #:	4212	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.
Condition Upon Re-inspection			Date:	
F5-4308.doc (05/06)				



### HAZARDOUS MATERIALS INVENTORY FORM



ADD DELETE REVISED 1	Page of
FACILITY ID# 3 0 0 3 5 38 BUSINI	Terrazzo E Marble Supply
I. FACILIT	TY INFORMATION
CONFIDENTIAL LOCATION   Yes X No 5 MAP#	Ézné Shelves
CONFIDENTIAL LOCATION Yes No 5 MAP #	6 GRID# 4C 7
	AL INFORMATION
CHEMICAL NAME TErrazzo Mutrix Part B	WASTE Yes 8 TRADE SECRET Yes No 11
Civily Agent, Epocy	9 An EHS Chemical Yes No 12
CAS# 10 FIRE CODE HAZARD CLASSES (supplie	I *If EHS is *Yes*, all amounts must be LBS  id by GGFD)  13
TYPE (Check one item only) a. PURE b. MIXTURE c. WASTE	14 RADIOACTIVE Yes No 15 CURIES 16
PHYSICAL STATE (Check one item only)  a. SOLID  Ab. LIQUID  c GAS  17	FED HAZARD CATEGORIES a. FIRE b. REACTIVE c PRESSURE RELEASE 18  d. ACUTE HEALTH c CHRONIC HEALTH
AVERAGE DAILY 800 Gullow 19 MAXIMUM DAILY AMOUNT 1700 Sellon 3	20 ANNUAL WASTE AMOUNT Ø 21 STATE WASTE CODE Ø 22
UNITS a, GALLONS b, CUBIC FEET 23 DAYS ON SITE	5 Days 24 LARGEST CONTAINER 25 5 Days 55 gallon Drum
STORAGE CONTAINER (Check all that apply)  a. ABOVEGROUND TANK  b. UNDERGROUND TANK  f. NONMETALLIC DR  c. TANK INSIDE BLDG  g. METAL CONTAINE  d STEEL DRUM  h. CARBOY	☐ i. VAT ☐ m CYLINDER ☐ q. TANK WAGON 26  UM ☐ I FIBER DRUM ☐ n. GLASS CONTAINER ☐ r. RAIL CAR
STORAGE PRESSURE b. ABOV	E AMBIENT BELOW AMBIENT
STORAGE TEMPERATURE a. AMBIENT b ABOV	E AMBIENT . c. BELOW AMBIENT . d. CRYOGENIC 28
%WT HAZARDOUS COMPONENT (For mixt	ure or waste only) EHS CAS #
1 <50% 29 Aliphatic Amines	30 Yes X No 31 112-24-3 32
2 (30% 29 Pheno15	30 □ Yes XNo 31 84852-15-3 32
3 (20% 29 Poly ether diamino	30 Yes X(No 31 9046-10-0 32
4 29	30 Yes No 31 32
5 29	30 Yes No 31 32
	.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.  NG INFORMATION
1	p
UNDOT# UNDOT# Refer to shipping papers or MSDS	NFPA 704 HAZARD DIAMOND FIRE (RED)
0	HEALTH A 3 C PELLOW)
DOT HAZARD CLASS  Refer to shipping papers or MSDS	SPECIAL C WHITE
EPCRA YES NO	HAZARD W OX/W
x	MAKE AS MANY COPIES OF CHEMICAL
If EPCRA, Please Sign Here	36 INVENTORY FORM AS NEEDED

### Material Safety Data Sheet

Revision Date: 11/2007 Print Date: 11/2007

### Section 1: Product and Company Identification

Product Name:

Terroxy Resin Systems — Terrazzo Matrix, Part B

Product Use Description:

Curing Agent, Epoxy

Company:

Terrazzo & Marble Supply Companies

77 South Wheeling Road Wheeling, Illinois 60090

Telephone:

847.353.8000

Emergency Telephone Number:

800.424.9300 USA

01.703 527.3887 International

### Section 2: Composition / Information on Ingredients

Components	OSHA PEL	ACGIH TLV	Concentraion (Weight %)
Aliphatic Amines	N/E	N/E	<50
Phenols	N/E	N/E	<30
Polyetherdiamine	N/E	N/E	<20
Solvent	N/E	N/E	<12

■ N.E. Not Established

Composition is trade secret.

Substances listed are present in concentration of 1% or greater, or 0.1% if cited as a potential Carcinogen in the OSHA Hazards communication Standard. Where proprietary ingredient is listed the identity is available as provided in 29 CFR 1910 1200.

### Section 3: Hazards Identification

**Emergency Overview:** 

Vapors can cause severe irritation of respiratory tract Vapors can cause irritation and burns to the eyes.

Can cause burns to skin

Can cause severe damage to mouth and throat.

Potential Health Effects:

Inhalation:

Can cause severe eye, skin and respiratory tract burns

Eye contact:

Causes eye burns. May cause blindness. Severe eye irritation.

Skin contact:

Harmful in contact with skin. Causes skin burns. Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting

Ingestion:

Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation

of the oesophagus and the stomach

Chronic Health Hazard:

This product contains no listed carcinogens according to IARC, ACGIH, NTP and or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent

damage. Repeated or prolonged contact causes sensitization, asthma and eczemas

<sup>■</sup> Alf-ingredients are registered on TSCA

### Section 3: Hazards Identification (continued)

Carcinogenicity:

NTP CARCINOGEN: No IARC MONOGRAPHS: No

OSHA REGULATED No

Exposure Guidelines:

Target Organs: Skin, Eyes

Aggravated Medical

Conditions

Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may aggravate existing respiratory conditions such as asthma, bronchitis or fibrotic respiratory disease

### **Section 4: First Aid Measures**

General advice:

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation

immediately.

Eve contact:

Hold cyclids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical

care. If medical care is not promptly available, continue to irrigate for one hour

Skin contact:

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS. Application of

corticosteroid cream has been effective in treating skin irritation.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation:

Move to fresh air.

### **Section 5: Fire Fighting Measures**

Suitable extinguishing media:

Alcohol-resistant foam. Carbon thoxide (CO2).

Dry chemical Dry sand.

Limestone powder.

Specific hazards:

May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment

for fire-fighters:

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear

self contained breathing apparatus for fire fighting if necessary

Further information:

Do not allow run off from fire fighting to enter drains or water courses

OSHA Flamability Class Combustible Class III B

### Section 6: Accidential Release Measures

Personal precautions:

Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye face protection. Evacuate personnel to sale areas.

Environmental precautions:

Construct a dike to prevent spreading.

Methods for cleaning up:

Approach suspected leak areas with caution. Absorb spill with clay, diatomaccous earth or other absorbent materials. Place in disposal containers.

Additional advice:

If possible stop flow of product. Avoid contact Allow only personnel wearing goggles neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended.

### Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Emergency showers and eye wash stations

should be readily accessible. Adhere to work practice rules established by government regulations. Use

personal protective equipment. When using, do not eat-drink or smoke

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well ventilated place. Do not

remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing

container past the pot life deadline, hear and a strong reaction will result.

Technical measures/Precautions: Do not store in reactive metal containers.

### Section 8: Exposure Controls / Personal Protection

**Engineering Measures:** 

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion proof

ventilation adequate to ensure concentrations are kept below exposure limits

Personal Protective Equipment:

Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate

NIOSH MSHA approved self-contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA's respirator standards (29 CFR 1010 134).

Not required for properly ventilated areas

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection: Neoprene gloves.

Butyl-rubber gloves Nitrile rubber Impervious gloves

The breakthrough time of the selected glove(s) must be greater than the intended use period

Eye Protection: Wear splash proof chemical resistant goggles

Full face shield with goggles underneath.

Skin and Body Protection: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be

appropriate if splashing can occur.

Environmental Exposure Controls: Construct a dike to prevent spreading.

Special Instructions for

Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes Provide readily accessible eye wash stations and safety showers. Wash at the end of Protection and Hygiene:

each workshift and before eating, smoking or using the toilet.

### Section 9: Physical and Chemical Properties

Form: Liquid. Color: Yellow

Odor: Amine like, Sharp amonia odor,

Relative density: 0.96 (1120 - 1)

Vapor pressure: 1.10 mmHg at 70 F (21 C)

Density: 59.931 lb (t (1.96 g cm ) at 70 F (21 C)

pH: 11.20

Boiling point/Range: > 392 F (200 C)

Flash point: 287.6 F (142 C) Water solubility: Completely Soluble Viscosity: 20 mPa.s at 77 F (25 C)

### Section 10: Physical and Chemical Properties

Stability:

Stable under normal conditions

Conditions to Avoid:

Contact with acids such as Hydrocholoric or Sulfuric

Materials to Avoid:

Product slowly corrodes copper, aluminum, zine and galvanized surfaces

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

Sodium hypochlorite

Organic acids (i.e. acetic acid, citric acid etc.)

Mineral acids.

CAUTION! N-Nitrosamies, many of which are known to be potent carcinogens, may be formed when the

product comes in contact with nitrous acid, nitrites or atmospheres with high nitrious oxide

concentrations.

Reactive metals (e.g. sodium, calcium, zinc etc.) Nitrous acid and other nitrosating agents Materials reactive with hydroxyl compounds

Oxidizing agents.

Hazardous Decomposition Products: Nitric acid

Ammonia

Nitrogen oxides (NOx).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide. Carbon dioxide (CO2).

Aldehydes

Flammable hydrocarbon fragments (e.g., acctylene)

When exposed to fire, oxides of Carbon and Nitrogen will be generated

Nitrosamme

Hazardous Polymerization:

Will not occur.

### Section 11: Toxicological Information

Acute Health Hazard

Ingestion:

LD50: 1,620 mg kg

Species: Method: Rat

od: Estimated

Inhalation:

No data available.

Skin.:

LD50 - 2, (00 mg kg

Species: Method: Rabbit Estimated

Eye irritation/corrosion:

irritation/corrosion:

Severe eye irritation.

Acute dermal

Severe skin irritation. Corrosive to the skin of a rabbit.

Sensitization:

Sensation has occured in labratory animals after repeated exposure

Chronic Health Hazard

Results from a battery of short term genotoxicity tests on this material or its components indicate

mutagenic activity.

### **Section 12: Ecological Information**

**Ecotoxicity effects** 

Aquatic toxicity:

No data available

Toxicity to fish - Components: Phenol

LC50 (96h) 0128 mg l

Species: Fathead Minnow (Pimephales Promelas)

Toxicity to daphnia - Components:

Phenol Phenol EC50 (48 h): 0.0848 mg l

Species Daphnia Species: Daphnia

FC50 (48 h): 0.19 mg l

Toxicity to other organisms:

No data available

Persistence and degradability

Mobility:

No dara available

Bioaccumulation:

No data available.

Bioaccumulation - Components:

Phenol:

Moderate bioaccumulation potential.

### Section 13: Disposal Considerations

Waste from residues / unused products:

Dispose in an approved incinerator or an approved landfull. Contact supplier if guidance is

required.

Contaminated packaging:

Dispose of container and unused contents in accordance with federal, state, and local

### Section 14: Transport Information

DOT

Proper shipping name

Amines, liquid, corrosive, n.o.s. (4.4. Triethylenetetramine, Nonylphenol).

Class

UN2735

UNID No Packing group:

111

NAFRG No.

153

IATA

Proper shipping name:

Amines, liquid corrosive, n.o.s. (4.4 Triethylenetetramin, Nonylphenol)

Class UNID No.:

UN2735

Packing group

111

**IMDG** 

Proper shipping name

AMINES, LIQUID, CORROSIVE, NO.S. (4,4 Triethylenetetramin, Nonylphenol)

Class

LN ID No

LN2735

Packing group:

Ш

Proper shipping name

AMINES, HQUID, CORROSIVE, NO.S. (4,4) Triethylenetetramin, Nonylphenol)

Class UN ID No

Packing group.

UN2735 111

### Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es)Corrosive Sensitizer

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory are no longer polymer.
Canada	DSL	Included on Inventory
Australia	AICS	Included on Inventory
Japan	ENCS	Included on Inventory
South Korea	ECL	Not on Inventory
China	SEPA	Included on Inventory
Philippines	PICCS	Included on Inventory

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above de minimus level.

US California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification

Toxic Material Causing Other Toxic Effects, Corrosive Material

### **Section 16: Other Information**

#### **HMIS Rating**

Health 3
Flammability 1
Reactivity 0
Physical hazard C

Prepared by Terrazzo & Marble Supply Companies

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.



### HAZARDOUS MATERIALS INVENTORY FORM



X AD	D DELETE	REVISED	1			Р	age -	of	2
FACILITY ID# 3 0	0 3 5	38 BL	JSINESS NAME	Terrazzo	É Mai	610 5	موريخ	14	3
		I. FAC	ILITY INFO		•				
CHEMICAL LOCATION	Rack #2, 5	7th Bay,	2nd Sh	elf.					4
CONFIDENTIAL LOCATION	N Ye	s No 5 M	AP#		6	GRID#	3C		7
		II. CHE	MICAL INFO	ORMATION					
CHEMICAL NAME	Primer Part	В		WASTE	Yes 8	TRADE SE		Yes No	11
COMMON NAME	Curing Aqu	ut Epox	Υ		9	An EHS Ch	emical	Yes No	12
CAS# Mixtur	O FIRE CO	DE HAZÁRD CLASSES (su	upplied by GGFD)					- Maria Maria de Como	13
TYPE (Check one item only)	a. PURE b. MIX	TURE C WA	ISTE 14	RADIOACTIVE	☐ Yes 🗘	No 15	CUF	RIES	16
PHYSICAL STATE (Check one item only)	a solid b Liqu	JID C GAS	17 FED HAZ CATEGO	ARD a. FIF	RE 🗶 b.	REACTIVE	·	PRESSURE RELEASE	18
				1/	CUTE HEALTH			CHRONIC HEALTH	
AVERAGE DAILY 70	gallons MAXIMUM D	200 gallon	5	AL WASTE AMOUN	Ø	21 STA	TE WAS	TE CODE	22
UNITS a GALLOI	NS 🔲 b. CUBIC FEET	23 DAYS ON SITE	365 D	245	24 LAR	S q q (		Pail	25
STORAGE CONTAINER (Check all that apply)	a. ABOVEGROUND TANI b. UNDERGROUND TAN c tank inside bldg d steel drum		C DRUM	I. VAT I. FIBER DRUM I. BAG(S) I. BOX(S)	D PLAS		ER NER	q. TANK WAGON  r. RAIL CAR  s. TOTE BIN  t. OTHER	26
STORAGE PRESSURE	X a AMBIENT	□ ь. А	ABOVE AMBIENT	□ c.	BELOW AMBI	ENT			27
STORAGE TEMPERATUR	a. AMBIENT	□ b, A	BOVE AMBIENT	□ c.	BELOW AMBI	ENT	□ d.	CRYOGENIC	28
%WT	HAZARDOUS C	OMPONENT (For I	mixture or was	te only)		EHS		CAS#	
1 25-40 29	Nonylpheno	1		30	☐ Yes	No	31	25154-52-3	32
<sup>2</sup> 20-30 <sup>29</sup>	Formai dehyde, Pa	your w/ Benz	enemine	Hydrografied	☐ Yes	No.	31	135108-88-2	32
<sup>3</sup> 5-15 <sup>29</sup>	Benzyl Aleo			30	☐ Yes	Ø,No	31	100-51-6	32
4 29			,	30	☐ Yes	□ No	31		32
5 29				30	☐ Yes	□ No	31		32
If more hazardous compone	nts are present at greater than 1% by		, or 0.1% by weigh RDING INFO		ch additional sh	eets of paper	capturin	g the required information.	
	i-36	· LAGA	COMO IMI	, KIII ATTON					
UNDOT#	UN 2735		33			PA 704 HA E(RED) 触	ZARD	DIAMOND	
	Refer to shipping pa	pers or MSDS			HEALTH	1/2	\\\	REACTIVE (YELLOW)	
DOT HAZARD CL		ing papers or MSI	OS 34			ECIAL		WHITE	
EPCRA TYES	No		35	·L	HAZ	ZARD 💆	<u> </u>	OX/W 17	
x	e .			MAI	KE AS MA	NY COP	IES O	F CHEMICAL	Ì
	If EPCRA, Please	Sign Here	36		INVENTO	RY FOR	M AS	NEEDED	

### Material Safety Data Sheet

Revision Date: 01/2008 Print Date: 01/2008

### Section 1: Product and Company Identification

Product Name:

Terroxy' Resin Systems — Primer, Part B

Product Use Description:

Curing Agent, Epoxy

Company:

Terrazzo & Marble Supply Companies

77 South Wheeling Road Wheeling, Illinois 60090

Telephone:

847.353.8000

800.424,9300

Emergency Telephone Number:

1353

01.703.527.3887 International

### Section 2: Composition / Information on Ingredients

Components	CAS Number	OSHA PEL	ACGIH TLV	WT%
Nonylphenol	25154-52-3	N/E	N/E	25-40
Formaldehyde, Polymer with Benzeneamine Hydrogenated	135108-88-2	N/E	N/E	20-30
Benzyl Alcohol	100-51-6	N/E	N/E	5-15
Tetraethylenepentamine (TEPA)	112-57-2	N/E	N/E	3-8
Tris-2,4,6 (Dimethylaminomethyl) Phenol	90-72-2	N/E	N/E	1-5

<sup>■</sup>N.F. Not F-tablished

Substances listed are present in concentration of Po or greater, or  $\delta$  Po if cited as a potential Carcinogen in the OSHA Hazards communication Standard. Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200

### Section 3: Hazards Identification

**Emergency Overview:** 

Vapors can cause severe irritation of respiratory tract.

Vapors can cause irritation and burns to the eyes

Can cause irritation to skin

Can cause severe damage to mouth and throat.

#### Potential Health Effects

Inhalation:

Headache nausea respiratory tract irritant.

Eye contact:

Can cause irritation, burning, tearing, redness, swelling and possible chemical burns to the eyes.

Skin contact:

Severe irritation and possible skin sensitizer.

Ingestion:

Abdominal pain, nausea, vomiting, diarrhea, throat and mouth burns.

Chronic Health Hazard:

Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may aggravate existing respiratory conditions such as asthma, bronchitis or librotic respiratory disease

ALL ingredients are registered on TSCA

### Section 3: Hazards Identification (continued)

Carcinogenicity; NTP CARCINOGEN: No LARC MONOGRAPHS: No OSHA REGULATED No

Exposure Guidelines: Target Organs Skin, Fycs

Aggravated Medical Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may

aggravate existing respiratory conditions such as asthma, bronchitis or librotic respiratory disease

### Section 4: First Aid Measures

General advice: Swallowing this corrosive material may result in severe ulceration, inflammation and possible perforation of

the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal mubation. Contact a Poison Control Center for

additional treatment information

Eye contact: Flush at once with potable water for at least 15 minutes DO NOT attempt to neutralize with chemical

agents. Get medical attention.

Skin contact: Flush at once with potable water for at least 15 minutes DO NOT attempt to neutralize with chemical

agents. Get immediate medical attention. Remove contaminated clothes. Wash before reuse. Destroy

contaminated shoes. Get medical attention if swelling and or irritation occurs.

Ingestion: Give water to dilute stomach contents, DO NOT induce vomiting. If vomiting occurs, give fluids again. Get

immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation: Move to fresh air. Get medical attention if effects persist.

### **Section 5: Fire Fighting Measures**

Suitable extinguishing media : Alcohol resistant foam

Carbon dioxide (CO2).

Dry chemical Dry sand.

Limestone powder.

Specific hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the

formation of very toxic aqueous solutions. Do not allow run off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be

evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear

positive pressure self contained breathing equipment. Use water to cool containers exposed to fire, Water

may be an inelfective extinguishing agent.

Further information: Vapors are heavier than air and may travel along the ground or be moved by ventilation to ignition sources

at locations distant from material handling point. Pressure may build up in containers and create an

explosion hazard.

OSHA Flamability Class. Combustible Class III B

#### Section 6: Accidential Release Measures

Personal precautions: Use positive pressure self contained breathing equipment and chemically protective clothing. Wear suitable

protective clothing, gloves and eye face protection. Fvacuate personnel to safe areas.

Environmental precautions: Construct a dike to prevent spreading.

Methods for cleaning up: Approach suspected leak areas with caution. Contact Air Products. Emergency Response Center for advice

Place in appropriate chemical waste container.

Additional advice: If possible stop flow of product. Avoid contact. Allow only personnel wearing goggles, neoprene or rubber

gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended.

Absorb spill with clay, diatomaceous earth or other absorbent materials. Place in disposal containers

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### Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Emergency showers and eye wash stations

should be readily accessible. Adhere to work practice rules established by government regulations. Use

personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well ventilated place. Do not

remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing

container past the pot life deadline, heat and a strong reaction will result

Technical measures/Precautions: Do not store in reactive metal containers.

### Section 8: Exposure Controls / Personal Protection

### **Engineering Measures:**

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion proof ventilation adequate to ensure concentrations are kept below exposure limits.

### Personal Protective Equipment:

Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate

> NIOSH MSHA approved self-contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA's respirator standards (2º CFR 1910 134).

Not required for properly ventilated areas.

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection:

Neoprene gloves Butyl-rubber gloves. Nitrile rubber. Impervious gloves.

The breakthrough time of the selected glove(s) must be greater than the intended use period

Eye Protection: Wear splash proof chemical resistant goggles

Full face shield with goggles underneath

Skin and Body Protection: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be

appropriate if splashing can occur.

Environmental Exposure Controls: Construct a dike to prevent spreading.

Special Instructions for Discard containinated leather articles. Remove containinated clothing. Drench affected area with water for Protection and Hygiene:

at least 15 minutes Provide readily accessible eye wash stations and salety showers. Wash at the end of

each workshift and before eating, smoking or using the toilet.

### Section 9: Physical and Chemical Properties

Color: Dark amber liquid with slight ammoniacal odor

Odor: Amine like. Sharp amonia odor,

Relative density: 0.99 (H2O 1)

Vapor pressure: < 2.00 mmHg at 70 F (21 °C)

VOC:

Density: 61.179 lb ft3 (0.99 g cm3) at 70 °F (21 °C)

pH:

Boiling point/Range: >300 F (148 C) Flash point: 200 F (93 C) Water solubility: Slight

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### Section 10: Physical and Chemical Properties

Stability:

Stable under normal conditions

Conditions to Avoid:

Not Applicable

Materials to Avoid:

Sodium hypochlorite

Organic acids (i.e. acetic acid, citric acid etc.)

Mineral acids

Product slowly corrodes copper, aluminum, zine and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds.

Oxidizing agents.

Epoxy resins under uncontrolled conditions

Hazardous Decomposition Products: Nitrie acid

Ammonia

Nitrogen oxides (NOx).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide. Carbon dioxide (CO2)

Aldehydes

Flammable hydrocarbon fragments (e.g., acetylene).

When exposed to fire, oxides of Carbon and Nitrogen will be generated.

Hazardous Polymerization:

Will not occur.

### Section 11: Toxicological Information

#### Acute Health Hazard

Ingestion:

LD50 > 500 mg kg

Species: Rat Method: Estimated

Inhalation:

LC50 (1 h) > 20 mg/l

Species: Rat Method: Estimated

Skin.:

LD50  $\Rightarrow$  2,000 mg kg

Species: Rabbit Method: Estimated

Eye irritation/corrosion:

Severe eye irritation

Acute dermal

irritation/corrosion:

Severe skin irritation.

Sensitization:

May cause sensitization by skin contact. Sensitization has occured in laboratory animals after repeated

exposures.

#### Chronic Health Hazard

The product or a component may be mutagenic, the data is inconclusive. Mixed Polycycloaliphatic amines was tested in rats for systemic effects in a subchronic (28 day) oral study at doses ranging from 15 to 300 mg kg day. Effects seen at 300 mg kg day included decreased survival, decreased body weight gain, increased liver, kidney, and adrenal weights and histological changes in the liver, kidney, adrenals and spleen. The No Observed Adverse-Effect Level (NOAFI) was 15 mg/kg day. Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscules. The No Observed Adverse-Effect Level (NOAFI) was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice.

### Section 12: Ecological Information

**Ecotoxicity effects** 

Aquatic toxicity: No data available on the product itself.

Toxicity to fish - Components:

Nonylphenol LC50 (96 h): 0.128 mg l Species: Fathead Minnow (Pintephales Promelas)

Toxicity to daphnia - Components:

Nonylphenol EC50 (48 h) 0.0848 mg l Species Daphnia Nonylphenol EC50 (48 h) 0.19 mg l Species : Daphnia

Toxicity to other organisms: No data available on the product itself.

Persistence and degradability

Mobility: No data available

Bioaccumulation: No data available on the product itself.

Bioaccumulation - Components: Formaldehyde, polymer with

benzeneamine, hydrogenated: Does not bioaccumulate

Nonylphenol: Moderate bioaccumulation potential

### **Section 13: Disposal Considerations**

Waste from residues / unused products:

Contact supplier if guidance is required.

Contaminated packaging:

Dispose of container and unused contents in accordance with federal, state, and local

requirements.

### **Section 14: Transport Information**

CFR

Proper shipping name Amines, liquid, corrosive, N.O.S. (Cycloaliphatic Amine/Nonylphenol)

Class 8
UN ID No. E'N2735
Packing group: III
NAERG No.. 153

IATA
Proper shipping name Amines, liquid, corrosive, N.O.S. (Cycloaliphatic Amine Nonylphenol)

Class: 8
UN ID No UN2735
Packing group: III

IMDG

Proper shipping name: Amines, liquid, corrosive, N.O.S. (Cycloaliphatic Amine Nonylphenol)

CTC

Proper shipping name: Amines, liquid, corrosive, N.O.S. (Cycloaliphatic Amine Nonylphenol)

2 33

### Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es)Corrosive, Sensitizer.

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory are no longer polymer.
Canada	DSL	Included on Inventory
Australia	AICS	Included on Inventory
Japan	ENCS	Included on Inventory
South Korea	ECL	Included on Inventory
China	SEPA	Included on Inventory
Philippines	PICCS	Included on Inventory

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: Acute Health Hazard

FPA SARA Title III Section 313 (40 CFR 372) Component(s) above de minimus level.

U.S. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm

WHMIS Hazard Classification:

Toxic Material Causing Other Toxic Effects, Corrosive Material

### **Section 16: Other Information**

### **HMIS Rating**

Health.	- 3
Flammability	}
Reactivity:	G
Physical hazard	C

Prepared by Terrazzo & Marble Supply Companies.

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.



### HAZARDOUS MATERIALS INVENTORY FORM



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	NFIDENTIAL LOC	CATION		Yes	No 5	MAP#	(				6 GRID#	3c	-		7
					II. CH	IEMIC/	AL INF	ORMA	TION						
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co	MMON NAME									,	An EHS C		Yes	No.	12
CA	S# AA.			gent E	HAZARD CLASSES	(supplied	by GGFD	)			*If EHS is	"Yes", all	amounts must b	e LBS	13
	Mix		<u> </u>												
TYI	PE (Check one liem o		a. PURE	b. MIXTUR		WASTE	14	RADIOA		☐ Yes	PQ 110		RIES		16
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AVE	RAGE DAILY		, 19	T MAYIMUM DAII	· · · · · · · · · · · · · · · · · · ·		2   45/5/1	IAL IMAG	TE AMOUN	CUTE HEALT	<del></del>		e. CHRONIC HE	ALTH	
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STO	RAGE TEMPER	ATURE	¥	a. AMBIENT		ABOVE	AMBIENT	1	□ e	BELOW AM	BIENT	_ a	CRYOGENIC		28
	%WT		HAZA	RDOUS CO	MPONENT (F	or mixtu	re or wa:	ste only,	)		EHS		C	AS#	
1	45-55 2	9	Non	ylphenol					30	☐ Yes	₩ No	31	25154-	52-3	32
2	5-15 2	9	Aliphati	ic Amin	es				30	☐ Yes	₩.No	31	1761-	71-3	32
3	2	•							30	☐ Yes	□ No	31			32
4	2	9							30	☐ Yes	□ No	31			32
5	2	•							30	☐ Yes	□No	31			32
If m	ore hazardous cor	nponent	s are present at gr	eater than 1% by we	ight if non-carcinoge					ch additional	sheets of pape	r capturir	ng the required in	formation.	
					PLAC	ARDIN	IG INFO	ORMA'	TION						
UN	IDOT#		UN	2735			33					AZARD	DIAMOND		
			Refer to s	shipping pape	rs or MSDS		_			FI	RE (RED)	1>	REAC	TIVE	
DC	T HAZARD	CLA	SS _	8			34			HEALT (BLUE		$\chi_c$			
			Ref	er to shipping	papers or M	SDS	_				PECIAL A	C	WHITE OX/W	27	
EP	CRA 🗆	'ES	<b>⊠</b> ′ио	•			35		L	•					
	x						•		MAI	KE AS N	IANY COF	PIES C	F CHEMIC	AL	
			If EPCR	A, Please Si	an Here		36			INVENT	ORY FOR	RM AS	NEEDED		1

### Material Safety Data Sheet

Revision Date: 11/2007

### Section 1: Product and Company Identification

Product Name:

Terroxy Resin Systems — Iso Crack Epoxy Membrane, Part B

Product Use Description:

Curing Agent, Epoxy

Company:

Terrazzo & Marble Supply Companies

77 South Wheeling Road Wheeling, Illinois 60090

Telephone:

847.353.8000

Emergency Telephone Number: 800.424.9300

USA

01.703.527.3887 International

### Section 2: Composition / Information on Ingredients

Components	CAS#	OSHA PEL	ACGIH TLV	Concentraion (Weight)
Nonylphenol	25154-52-3	N/E	N/E	45-55
Aliphatic Amines	1761-71-3	N/E	N/E	5-15 -

■ N E · Not Established

■ ALL ingredients are registered on TSCA

The remaining components are trade secret.

Substances listed are present in concentration of 1% or greater, or 0.1% if cited as a potential Carcinogen in the OSHA Hazards communication Standard. Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200.

### Section 3: Hazards Identification

**Emergency Overview:** 

Vapors can cause severe irritation of respiratory tract.

Vapors can cause irritation and burns to the eyes.

Can cause burns to skin

Can cause severe damage to mouth and throat.

Potential Health Effects:

Inhalation:

Can cause severe eye, skin and respiratory tract burns.

Eye contact :

Causes eye burns. May cause blindness. Severe eye irritation.

Skin contact:

Harmful in contact with skin. Causes skin burns. Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting

Ingestion:

Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a clanger of perforation

of the oesophagus and the stomach.

Chronic Health Hazard:

This product contains no listed carcinogens according to IARC, ACGIH, NTP and or OSHA in

concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent

damage. Repeated or prolonged contact causes sensation, asthma and eczemas.

### Section 3: Hazards Identification (continued)

Carcinogenicity:

NTP CARCINOGEN: No TARC MONOGRAPHS: No

OSHA REGULATED No

**Exposure Guidelines:** 

Target Organs: Skin, Eves

Aggravated Medical

Conditions

Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may aggravate existing respiratory conditions such as asthma, bronchitis or fibrotic respiratory disease.

### **Section 4: First Aid Measures**

General advice:

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped trained personnel should begin cardiopulmonary resuscitation.

immediately.

Eye contact:

Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Skin contact :

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.

Take off contaminated clothing and shoes immediately. NOTF TO PHYSICIANS: Application of

corticosteroid cream has been effective in treating skin irritation

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation:

Move to fresh air.

### Section 5: Fire Fighting Measures

Suitable extinguishing media:

Alcohol-resistant foam.

Carbon dioxide (CO2). Dry chemical.

Dry sand

Limestone powder.

Specific hazards:

May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run off from fire lighting to enter drains or water courses, Incomplete combustion may form earbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment

for fire-fighters:

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment, Wear

self contained breathing apparatus for fire fighting il necessary.

Further information:

Do not allow run off from fire fighting to enter drains or water courses.

OSHA Flamability Class: Combustible Class III B

### Section 6: Accidential Release Measures

Personal precautions:

Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye face protection. Evacuate personnel to safe areas.

Environmental precautions:

Construct a dike to prevent spreading.

Methods for cleaning up:

Approach suspected leak areas with caution. Contact Air Products. Emergency Response Center for advice. Place in appropriate chemical waste container.

Additional advice:

If possible, stop flow of product. Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended. Absorb spill with clay, diatomaccous earth or other absorbent materials. Place in disposal containers.

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### Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Emergency showers and eye wash stations

should be readily accessible. Adhere to work practice rules established by government regulations. Use

personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well ventilated place. Do not

remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing

container past the pot life deadline, heat and a strong reaction will result

Technical measures/Precautions: Do not store in reactive metal containers

### **Section 8: Exposure Controls / Personal Protection**

### Engineering Measures:

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

#### Personal Protective Equipment:

Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate

MOSH MSHA approved self-contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA's respirator standards (29 C.FR 1910 134).

Not required for properly ventilated areas.

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection: Neoprene gloves.

Butyl rubber gloves. Nitrile rubber. Impervious gloves.

The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye Protection: Wear splash-proof chemical resistant goggles

Full face shield with goggles underneath.

Skin and Body Protection: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be

appropriate if splashing can occur.

Environmental Exposure Controls: Construct a dike to prevent spreading.

Special Instructions for Discard contaminated leather articles. Remove contaminated clothing, Drench affected area with water for Protection and Hygiene: at least 15 minutes Provide readily accessible eye wash stations and safety showers. Wash at the end of

each workshift and before cating, smoking or using the toilet

### Section 9: Physical and Chemical Properties

Color: Light yellow.

Odor: Amine like Sharp amonia odor.

Relative density: 0.98 (H2O 1)

Vapor pressure: < 2.00 mmHg at 70 F (21 °C)

VOC: 0.

Density: 61.179 lb ft3 (0.98 g/cm3) at 70 F (21 C)

pH: 10 Roiling point/Range: >430

> 430 F

Flash point: 303 F (150.56 C) Water solubility: Partial

### Section 10: Physical and Chemical Properties

Stability: Stable under normal conditions.

Conditions to Avoid: Contact with acids such as Hydrocholoric or Sulfuric

Materials to Avoid: Sodium hypochlorite.

Organic acids (i.e. acetic acid, citric acid etc.).

Mineral acids.

Product slowly corrodes copper, aluminum, zine and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion

Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds.

Oxidizing agents.

Epoxy resins under uncontrolled conditions.

Hazardous Decomposition Products: Nitric acid

Ammonia

Nitrogen oxides (NOx).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide. Carbon dioxide (CO2).

Aldehydes

Flammable hydrocarbon fragments (e.g., acetylene).

When exposed to fire, oxides of Carbon and Nitrogen will be generated.

Hazardous Polymerization: Will not occur.

### Section 11: Toxicological Information

Acute Health Hazard

Ingestion: LD50: 1,620 mg kg

Species: Rat

Method: Estimated

Inhalation: LC50 (1 h)  $\rightarrow$  20 mg l

Species: Rat

Method: Fstimated

Skin.: 1 D50 → 1,000 mg kg

Species: Rabbit.

Method: Fstimated

Fye irritation/corrosion: Severe eye irritation.

Acute dermal

Severe skin irritation. Corrosive to the skin of a rabbit

irritation/corrosion:

Sensitization:

May cause sensitization by skin contact.

### Chronic Health Hazard

The product or a component may be mutagenic, the data is inconclusive

### Section 12: Ecological Information

**Ecotoxicity effects** 

Aquatic toxicity: No data available

Toxicity to fish - Components:

Nonylphenol LC50 (96 h): 0 128 mg l Species: Fathead Minnow (Pimephales Promelas)

Methylenebiscyclohexanamine, 4,4'-LC50 (96 h): 40 100 mg/ Species: Golden Orfe (Leuciscus idus).

Toxicity to daphnia - Components:

Nonylphenol EC50 (48 h): 0.0848 mg/l Species: Daphnia Nonylphenol EC50 (48 h): 0.19 mg l Species : Daphnia

Methylenebiscyclohexanamine, 4,4'-FC50 (48 h): 6.84 mg 1 Species Daphnia magna.

Toxicity to algae - Components:

Methylenebiscyclohexanamine, 4,41-FC50 (72 h): 140 200 mg l Species Algae.

Toxicity to other organisms:

No data available.

Persistence and degradability

Mobility: No data available

Bioaccumulation: No data is available on the product itself

Bioaccumulation - Components:

Nonylphenol: Moderate bioaccumulation potential.

### Section 13: Disposal Considerations

Waste from residues /

unused products:

Dispose in an approved incinerator or an approved landfill. Contact supplier it guidance is

Contaminated packaging:

Dispose of container and unused contents in accordance with federal, state, and local

requirements.

### Section 14: Transport Information

**CFR** 

Proper shipping name Amines, liquid, corrosive, n.o.s. (4.4 Methylenchisevelohexanamine, Nonylphenol)

Class UN ID No: UN2735 Packing group Ш NAFRG No.: 153

IATA

Proper shipping name Amines, liquid, corrosive, n.o.s. (4.4. Methylenebiscyclohexanamine, Nonvlphenol)

Class: UN ID No.: UN2735 Packing group Ш

**IMDG** 

Proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (4,4. Methylenebisevelohexanamine, Nonylphenol)

Class UNID No. UN2735 Packing group Ш

CTC

Proper shipping name: AMINES, LIQUID, CORROSIVE, NO.S (4,4 Methylenebisevelohexanamine, Nonylphenol)

Class: UN ID No.: UN2735 Packing group: Ш

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### Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(cs)Corrosive Sensitizer.

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory are no longer polymer.
Canada	DSL	Included on Inventory
Australia	AICS	Included on inventory
Japan	ENCS	Included on Inventory
South Korea	ECL	Included on Inventory
China	SEPA	Included on Inventory
Philippines	PICCS	Included on Inventory

FPA SARA Title III Section 312 (40 CFR 370) Hazard Classification. Acute Health Hazard

FPA SARA Title III Section 313 (40 CFR 372) Component(s) above de minimus level-None.

U.S. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65).

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification:

Toxic Material Causing Other Toxic Effects, Corrosive Material

### **Section 16: Other Information**

#### **HMIS Rating**

Health:	3
Flammability	1
Reactivity	0
Physical bazard:	C

Prepared by Terrazzo & Marble Supply Companies

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.



### HAZARDOUS MATERIALS INVENTORY FORM



X	ADD DELETE	REVISED 1	W.		Page of 4	_ 2
FACILITY ID# 3	0 3 5	38 BUSINESS	NAME Ferra 220 E	Marble S	مرمواب	3
		I. FACILITY	INFORMATION			
CHEMICAL LOCATION	Rack #Z,	6th Bay, 2nd	shelf			4
CONFIDENTIAL LOCAT	ION Yes	No 5 MAP#	(	6 GRID	· 3c	7
		II. CHEMICAL	INFORMATION			
Clear Resin Hardener Part B WASTE Yes B TRADE SECRET Yes No 11					11	
COMMON NAME	0 ' '	,			EPCRA see instructions  Chemical Yes No	12
CAS#	Curing Agent	Epoxy		*If EHS	is "Yes", all amounts must be LBS	
Mixto	re 10 FIRE COD	E HAZARD CLASSES (supplied by	GGFD)			13
TYPE (Check one item only)	a. PURE D. MIXTU	JRE C WASTE	14 RADIOACTIVE	Yes No	15 CURIES	16
PHYSICAL STATE (Check one Item only)	a. SOLID X b. LIQUI	D CGAS 17 FI	ED HAZARD a. FI	RE DE REACTIN	/E C PRESSURE RELEASE	18
AVERAGE DAILY 50	gallons 19 MAXIMUM DAI	loo sallons 20	ANNUAL WASTE AMOUN	<del></del>	STATE WASTE CODE	22
UNITS B GALL		23 DATS ON SITE		24 LARGEST CO	<del></del>	25
L] c. POUN *If EHS, amo	IDS d. TONS unt must be in pounds.	365	Days	590	llon Pail	
STORAGE CONTAINER (Check all that apply)	a. ABOVEGROUND TANK b. UNDERGROUND TANK c. TANK INSIDE BLDG d STEEL DRUM	e. PLASTIC DRUM  f. NONMETALLIC DRUM  g. METAL CONTAINER  h. CARBOY	i. VAT i. FIBER DRUM i. BAG(S) i. BOX(S)	m CYLINDER  n. GLASS CONT. o PLASTIC CONT p. IN MACH OR E	q. TANK WAGON AINER	26
STORAGE PRESSURE	a AMBIENT	☐ b. ABOVE AM	IBIENT C	BELOW AMBIENT		27
STORAGE TEMPERATU	RE AMBIENT	☐ b ABOVE AM	BIENT C	BELOW AMBIENT	d CRYOGENIC	28
%WT	HAZARDOUS CO	MPONENT (For mixture of	or waste only)	EHS	CAS#	
1 425 29	Isophoronediam	ine (IPD)	30	☐ Yes 🗡 No	31 2855-13-2	32
<sup>2</sup> < 26 <sup>29</sup>	Benzyl Alcoh	ol	30	☐ Yes X No	31 (00-51-6	32
3 < 14 29	Nonylphenol	W. 1	30	☐ Yes No	31 25154-52-3	32
4 29			30	☐ Yes ☐ No	31	32
5 29			30	☐ Yes ☐ No	31	32
If more hazardous compon	ents are present at greater than 1% by w			ch additional sheets of pa	per capturing the required information.	
PLACARDING INFORMATION						
UNDOT#	UN 2735		33		HAZARD DIAMOND	
	Refer to shipping pape	ers or MSDS		FIRE (RED)	REACTIVE	i
DOT HAZARD CL			34	HEALTH →	O (VEITOM)	
EDCDA Sissa		g papers or MSDS		SPECIAL HAZARD	WHITE OX/W. 37	
EPCRA YES XNO 35						
x	W FDOD A TI				PIES OF CHEMICAL	
_	If EPCRA, Please Si	gn Here	36	INVENTORY FO	RM AS NEEDED	

### Material Safety Data Sheet

Product Name: Terroxy Resin Systems — Clear Resin Hardener, Part B

### Section 1: Manufacturer Identification

Manufacturer's Name:

Terrazzo & Marble Supply Companies

Address:

77 South Wheeling Road, Wheeling, Illinois 60090 USA

**Emergency Number:** 

800.424.9300

Date Printed:

04 04

Information Number:

847.353.S000

Preparer:

W. Gallinaitis

### Section 2: Hazardous Ingredients

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazard Materials Information System (WHMIS). Unlisted ingredients are not "hazardous" per the OSHA standard and/or are not found on the WHMIS ingredient disclosure list:

Chemical Name	CAS#	OSHA PEL	ACGIH TLV	WT %
Polyetherdiamine	_	NF	N⊬F	121
Isophoronediamine (IPD)	2855-13-2	N.F.	NE	:25
Benzyl Alcohol	100 51-6	ΝE	N F	·26
Nonylphenol	25154-52-3	NE	N/E	(14
Trimethylchexamethylcnediamine (TMD)	25620-58-0	NE	NF	<b>'</b> 8
Cycloaliphatic Amine		N/E	N/E	,6

Substances listed are present in concentration of 1% or greater, or 0.4% if cited as a potential Carcinogen in the OSHA Hazards Communication Standard. Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200.

### Section 3: Health Hazard Data

Health Risks and Symptoms of Exposure:

Inhalation: Vapors can cause severe irritation of respiratory tract.

Eyes: Vapors can cause irritation and burns to eyes

Skin: Corrosive Can cause burns to skin

Ingestion: Can cause severe damage to mouth and throat.

Health Hazards (acute and chronic):

Carcinogenicity:

NTP Carcinogen: No IARC Monographs: No OSHA Regulated: No

Medical Conditions Generally Aggravated by Exposure: Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may aggravate existing respiratory conditions such as asthma, bronchitis or librotic respiratory disease. Emergency and First Aid Procedures:

Eyes: Flush at once with potable water for at least 15 minutes. DO NOT attempt to neutralize with chemical agents. Get immediate medical attention.

Skin: Flush immediately for 15 minutes with potable water. DO NOT attempt to neutralize with chemical agents. Remove contaminated clothing. Launder before reuse. Discard contaminated shoes. Get medical attention if swelling and or irritation occurs.

Ingestion: Give water to dilute stomach contents. DO NOT induce vomiting. If vomiting occurs, give liquids again. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person. Inhalation: Remove to fresh air. Get medical attention if effects persist.

Other Instructions: Swallowing this corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

<sup>■</sup> N.E.— Not Established

<sup>&</sup>quot;-- " Denotes composition is trade secret

<sup>■</sup> ALL ingredients are registered on TSCA

### **Section 4: Control Measures**

HMIS Ratings: Flammability - 1 Reactivity - 0 Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded.

use appropriate NIOSH MSHA approved self-contained breathing equipment

or a full face respirator.

Ventilation:

Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Protective Gloves:

Neoprene or natural rubber gloves

Eve Protection: Other Protective Clothing Equipment: Chemical goggles Body Covering Clothes

Work/Hygienic Practices:

Practice good industrial hygiene. Wash with soap and water

before eating, smoking or using the restroom.

### Section 5: Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended, Absorb spill with clay, diatomaceous earth or other absorbent material. Place in disposal containers.

Waste Disposal Method: Dispose in an approved incinerator or an approved landfill

Precautions to be Taken in Handling and Storing: Avoid contact. Keep containers tightly closed when not in use. Do not remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing container past the pot-life deadline, heat and a strong reaction will result.

Other Precautions: None

### Section 6: Physical/Chemical Characteristics

Boiling Range: 390° F Vapor Density: NE

Vapor Pressure: 1.1 mm Hg @ 21°C (70°F)

VOC: Solubility in Water: Partial

Appearance and Odor: Low viscosity with sharp ammonia odor

Specific Gravity (H20=1): Evaporation Rate: NE

### Section 7: Fire and Explosion Hazard Data

Flash Point: -200°F Method Used: Closed Cup

Flammable Limits in Air:

Hazardous Polymerization:

By Volume-Lower: Not Determined By Volume-Upper: Not Determined

Extinguishing Media: Foam, Water Spray, Dry Chemical, CO 2 OSHA Flammability Class: Combustible Liquid, Class III B

Special Fire Fighting Procedures: Wear positive pressure self contained breathing equipment.

Use water to cool containers exposed to fire.

Unusual Fire & Explosion Hazards: Toxic fumes present when this material involved in fire. Containers may rupture.

### **Section 8: Reactivity Data**

Stability: Normally Stable

Conditions to Avoid: Contact with acids such as Hydrochloric or Sulfuric.

Incompatibility (materials to avoid): Avoid strong oxidizing agents and epoxy resins under uncontrolled conditions. Hazardous Decomposition:

When exposed to fire oxides of Carbon and Nitrogen will be generated

Will not occur

### **Section 9: Regulatory Information**

SARA Title III Section 313: Unless shown below, this product does not contain the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Chemical Name

Percent by Weight

PROP 65 (Careinogen). Unless shown below, this product does not contain the chemicals known to the state of California to cause cancer.

CAS#

Chemical Name

Percent by Weight

PROP 65 (Teratogenic): Unless shown below, this product does not contain the chemicals known to the state of California to cause birth defects or other reproductive harm.

CAS=

Chemical Name

Percent by Weight

None

None

PROP 65 (Carcinogen and Teratogenie). Unless shown below, this product does not contain the chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

CAS\*

Chemical Name

Percent by Weight

None

Hazardous Waste Information: Unless shown below, this product is not a hazardous waste according to definitions found in

State of Michigan Critical Materials: Unless shown below, this product does not contain ingredients appearing on the State of Michigan Critical Materials List.

CAST

Chemical Name

Percent by Weight

Vone

Department of Transportation

Proper Shipping Name:

Amines, Liquid Corrosive, N.O.S. (Trimethylhexamethylenediamines)

Hazard Class:

Class 8, Corrosive

UN/NA ID Number:

UN 2735

Packaging:

Ш

NAERG #:

153

### Section 10: Disclaimer

Data and recommendations presented herein are based upon our and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose

# GOEN GROUND STATE OF PARTIES

### HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

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ADD DELETE REVISED 1		Page	of 2
FACILITY ID# 3 0 0 3 5	SNAME FUZZO & Malble	Supply	3
I. FACILITY	INFORMATION		
CHEMICAL LOCATION			4
CONFIDENTIAL LOCATION Yes No 5 MAP#		6 GRID#	7
II. CHEMICA	L INFORMATION		
CHEMICAL NAME TETTAZZO MUTTIX PORT B	WASTE Yes	8 TRADE SECRET	Yes No 11
Curing Agent, Epoxy		9 An EHS Chemical	Yes No 12
CAS # MIXTURE 10 FIRE CODE HAZARD CLASSES (supplied b	y GGFD)	THENS IS YES, A	Il amounts must be LBS 13
TYPE (Check one item only)	14 RADIOACTIVE Ye	s No 15 CU	PRIES 16
(Check one item ority)	FED HAZARD  CATEGORIES  a. FIRE  d. ACUTE H	_	c. PRESSURE RELEASE 18  e. CHRONIC HEALTH
AVERAGE DAILY 3000 94   MAXIMUM DAILY 5000 94   20	ANNUAL WASTE AMOUNT	21 STATE WAS	<del></del>
UNITS A GALLONS Db. CUBIC FEET 23 DAYS ON SITE	Days	LARGEST CONTAINER 250 Scillon	Tote 25
STORAGE CONTAINER (Check ell that apply)  a. ABOVEGROUND TANK  b. UNDERGROUND TANK  f. NONMETALLIC DRUM  c. TANK INSIDE BLDG  g. METAL CONTAINER  d STEEL DRUM  h. CARBOY	L FIBER DRUM	m CYLINDER n. GLASS CONTAINER o PLASTIC CONTAINER p. IN MACH OR EQUIP	q. TANK WAGON 26  r. RAIL CAR s. TOTE BIN t. OTHER
STORAGE PRESSURE . AMBIENT . b. ABOVE A	MBIENT BELO	W AMBIENT	27
STORAGE TEMPERATURE S. AMBIENT D. ABOVE A	MBIENT C. BELO	W AMBIENT d	CRYOGENIC 28
%WT HAZARDOUS COMPONENT (For mixture	or waste only)	EHS	CAS#
1 K50% 29 Aliphatic Amires	30 🗆 Y	es UNO 31	112-24-3 32
2 <30% 29 Phenols	30 □ Y	es No 31	84852-15-332
3 < 70% 29 Poly & ther diamire	30 🗆 Y	es No 31	9046-10-6 32
4 29	30 🗆 Y	es 🗌 No 31	32
5 29	30 🗆 Y	_	32
If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1%	by weight if carcinogenic, attach addit INFORMATION	tional sheets of paper capturin	g the required information.
	TINI OKNIATION		
UNDOT# UN 2735	33	NFPA 704 HAZARD	DIAMOND
Refer to shipping papers or MSDS  DOT HAZARD CLASS		EALTH 3	REACTIVE (YELLOW)
Refer to shipping papers or MSDS	(0	SPECIAL C	WHITE 37
EPCRA YES XNO	35	HAZARD 🔻 🗸	OX/W "
x		S MANY COPIES O	F CHEMICAL
If EPCRA, Please Sign Here	<sup>36</sup> INVE	NTORY FORM AS	NEEDED

### Material Safety Data Sheet

Revision Date: 07 2008 Print Date: 07 2008

### Section 1: Product and Company Identification

Product Name:

Terroxy Resin Systems — Terrazzo Matrix, Part B — HY

Product Use Description:

Curing Agent, Epoxy

Company:

Terrazzo & Marble Supply Companies

77 South Wheeling Road Wheeling, Illinois 60090

Telephone:

847.353.8000

Emergency Telephone Number: 800.424.9300

01.703.527.3887 International

### Section 2: Composition / Information on Ingredients

Components	OSHA PEL	ACGIH TLV	Concentraion (Weight %)
Aliphatic Amines	N/E	N/E	<50
Phenols	N/E	N/E	<30
Polyetherdiamine	· N/E	N/E	<20

■ N.E. Not Established

ALL ingredients are registered on TSCA

Composition is trade secret.

Substances listed are present concentration of 1% or greater, or 0.1% if cited as a potential Carcinogen in the OSHA Hazards communication Standard Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200.

### Section 3: Hazards Identification

**Emergency Overview:** 

Vapors can cause severe irritation of respiratory tract. Vapors can cause irritation and burns to the eyes.

Can cause burns to skin

Can cause severe damage to mouth and throat.

Potential Health Effects:

Inhalation:

Can cause severe eye, skin and respiratory tract burns.

Eye contact:

Causes eye burns. May cause blindness. Severe eye irritation.

Skin contact:

Harmful in contact with skin. Causes skin burns. Symptoms of overexposure may be headache, dizziness.

tiredness, nausea and vomiting.

Ingestion:

Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Chronic Health Hazard:

This product contains no listed carcinogens according to IARC, ACGIH, NTP and or OSHA in

concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent

damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

### Section 3: Hazards Identification (continued)

Carcinogenicity:

NTP CARCINOGEN: No IARC MONOGRAPHS: No

OSHA REGULATED: No

Exposure Guidelines:

Target Organs: Skin, Eyes

Aggravated Medical

Conditions:

Skin contact may aggravate existing dermatitis (skin condition). Over exposure to vapor or mist may aggravate existing respiratory conditions such as asthma, bronchitis or fibrotic respiratory disease.

### Section 4: First Aid Measures

General advice:

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped trained personnel should begin cardiopulmonary resuscitation

immediately.

Eye contact:

Hold cyclids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical

care. If medical care is not promptly available, continue to irrigate for one hour.

Skin contact:

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of

corticosteroid cream has been effective in treating skin irritation.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation:

Move to fresh air.

### **Section 5: Fire Fighting Measures**

Suitable extinguishing media:

Alcohol-resistant foam

Carbon dioxide (CO2).

Dry chemical. Dry sand

Limestone powder.

Specific hazards:

May generate ammonia gas. May generate toxic introgen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run off from fire lighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be

evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment

for fire-fighters:

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear

self contained breathing apparatus for fire lighting if necessary.

Further information:

Do not allow run off from fire fighting to enter drains or water courses.

OSHA Flamability Class. Combustible Class III B

### Section 6: Accidential Release Measures

Personal precautions:

Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye face protection. Evacuate personnel to safe areas.

**Fnvironmental precautions:** 

Construct a dike to prevent spreading.

Methods for cleaning up:

Approach suspected leak areas with caution. Absorb spill with clay, diatomaceous earth or other absorbent materials. Place in disposal containers

Additional advice:

If possible, stop flow of product. Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended.

### Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Emergency showers and eye wash stations

should be readily accessible. Adhere to work practice rules established by government regulations. Use

personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not

remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing

container past the pot life deadline, heat and a strong reaction will result.

Technical measures/Precautions: Do not store in reactive metal containers.

### Section 8: Exposure Controls / Personal Protection

**Engineering Measures:** 

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion proof

ventilation adequate to ensure concentrations are kept below exposure limits.

Personal Protective Equipment:

Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate

NIOSH, MSHA approved self-contained breathing equipment or a full face respirator. Not required for

properly ventilated areas.

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection: Neoprene gloves.

Butyl rubber gloves. Nitrile rubber. Impervious gloves.

The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye Protection: Wear splash proof chemical resistant goggles

Full face shield with goggles underneath.

Skin and Body Protection:

Slicker Suit.

Impervious clothing. Full rubber suit (rain gear). Rubber or plastic boots.

Long sleeve shirts and trousers without cuffs.

Unvironmental Exposure Controls: Construct a dike to prevent spreading.

Special Instructions for Protection and Hygiene:

Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes Provide readily accessible eye wash stations and safety showers. Wash at the end of

each workshift and before eating, smoking or using the toilet.

### Section 9: Physical and Chemical Properties

Form: Liquid.
Color: Slt Yellow

Odor: Amine-like amonia odor.

Relative density: 0.95 (1120 - 1)

Vapor pressure: 3.9 mmHg at 70°F (21°C)

Density: 59.19 lb/ft\* (0.95 g cm\*) at 70°F (21°C)

Boiling point/Range: > 392°F (200°C)
Flash point: 230°F (110°C)

### Section 10: Physical and Chemical Properties

Stability:

Stable under normal conditions.

Conditions to Avoid:

Contact with acids such as Hydrocholoric or Sulfuric.

Materials to Avoid:

Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion

Sodium hypochlorite.

Organic acids (i.e. acetic acid, citric acid etc.).

Mineral acids

CAUTION! N Nitrosamies, many of which are known to be potent carcinogens, may be formed when the

product comes in contact with nitrous acid, nitrites or atmospheres with high nitrious oxide

concentrations.

Reactive metals (e.g. sodium, calcium, zinc etc.) Nitrous acid and other nitrosating agents. Materials reactive with hydroxyl compounds

Oxidizing agents.

Hazardous Decomposition Products: Nitric acid.

Nitrogen oxides (NOx).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide. Carbon dioxide (CO2).

Aldehydes

Flammable hydrocarbon fragments (e.g., acetylene).

When exposed to fire, oxides of Carbon and Nitrogen will be generated.

Nitrosamine

Hazardous Polymerization:

Will not occur.

### **Section 11: Toxicological Information**

Ingestion:

No data available on the product itself.

Ingestion - Components

Nonylphenol: Polyetherdiamine: LD50: 580 mg kg

Species: Rat

LD50: 2,880 mg/kg

Species: Rat

Aliphatic Amines:

LD50: 1,200 mg kg

Species: Rat

Inhalation:

No data available on the product itself.

Skin.:

No data available on the product itself

Skin Components

irritation/corrosion:

Nonylphenol:

LD50: 2,033 mg/kg

Species: Rubbit

Polyetherdiamine:

LD50: 2,980 mg kg

Species: Rabbit

Acute dermal

Corrosive to the skin of a rabbit.

### Chronic Health Hazard

This product or a component may be mutagenic, the data is inconclusive

### Section 12: Ecological Information

**Ecotoxicity** effects

Aquatic toxicity:

No data available

Toxicity to fish - Components:

Phenol

LC50 (96 h): 0.128 mg 1

Species: Fathead Minnow (Pimephales Promelas)

Toxicity to daphnia - Components:

Phenol Phenol EC50 (48 h): 0.0848 mg l

I C50 (48 h): 019 mg/l

Species: Daphnia

Species: Daphnia

Toxicity to other organisms:

No data available.

Bioaccumulation:

Persistence and degradability

Mobility:

No data available No data available

Bioaccumulation - Components:

Phenol:

Moderate bioaccumulation potential

### Section 13: Disposal Considerations

Waste from residues /

unused products:

Dispose in an approved incinerator or an approved landfill. Contact supplier if guidance is

required.

Contaminated packaging:

Dispose of container and unused contents in accordance with federal, state, and local

requirements.

### Section 14: Transport Information

DOT

Proper shipping name:

Amines, liquid, corrosive, n.o.s. (Aliphatic Amines, Nonylphenol)

Class:

UNID No.: Packing group: UN2735 Ш

NAERG No.:

153

IATA

Proper shipping name:

Amines, liquid, corrosive, n.o.s. (Aliphatic Amines, Nonylphenol)

Class

UNID No. Packing group:

Ш

UN2735

**IMDG** 

Proper shipping name:

AMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic Amines, Nonylphenol)

Class

UNID No.

LN2735

Packing group:

Ш

TDG

Proper shipping name:

AMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic Amines, Nonylphenol)

Class:

S

UN ID No.: Packing group UN2735

### Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es)Corrosive, Sensitizer,

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory are no longer polymer.
Canada	DSL	Included on Inventory
Australia	AICS	Included on Inventory
Japan	ENCS	Included on Inventory
South Korea	ECL.	Not on Inventory
China	SEPA	Included on Inventory
Philippines	PICCS	Included on Inventory

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above de minimus level None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65).

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification:

Toxic Material Causing Other Toxic Effects, Corrosive Material

### **Section 16: Other Information**

#### **HMIS Rating**

Health:	3
Flammability.	1
Reactivity:	0
Physical hazard:	(

Prepared by Terrazzo & Marble Supply Companies.

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.

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#### **PREVENTION:**

Part of the emergency pre-planning process is to identify potential hazards BEFORE an emergency, then either eliminate the hazard (if feasible) or prepare to handle the hazard should an emergency occur. To help you in this task, the form below is designed to help you identify potential hazards and to plan for minimizing the hazard. Complete this information for each hazardous materials storage location within your facility.

HAZARDOUS MATERIALS	DOCUMENTATIVE MEAGURE
STORAGE LOCATION	PREVENTATIVE MEASURE
1. Pack #2	Hundle products w/ care
2. Along West wall just Northof office 3. Along North wall Next to Overhærd Door	2 Still pallets :
3. Along North well Next to	) diatematicus Earth
4	
5	
6	N N
7	
8.	
Comments relating to the listed storage areas:	*
•	
All hazardous product to be s	store in the first
6 bays of Rack #2 on th	e 1st 3 Zue Shelves.
Prevention measures to be taken at this lo	
	r totes when puckaging product
- Diatemations Forth to	Soale up any product spilled
onto Floor	
Estimated date of completion: 10 120 108	
Actual date of completion: 10 (28) 08	>
MAKE ADDITIONAL COPIES OF T	HIS FORM AS NEEDED.