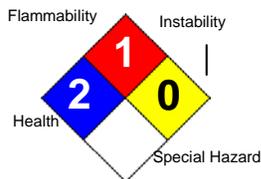


488 Polyaspartic Coating - Safety Yellow

(Part A)



HEALTH	2
FLAMMABILITY	1
PHYSICAL	0
PPE	X



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1. Product and Company Identification

Product Code: 488-SAFETY-YEL

Product Name: 488 Polyaspartic Coating - Safety Yellow / OP (Part A)

Trade Name: 488 Polyaspartic Coating - Safety Yellow / OP (Part A)

Information

Company Name: Epoxy Systems, Inc.
20774 W Pennsylvania Ave
Dunnellon, FL 34431

Phone Number: +1 (352) 489-1666

Emergency Contact: PERS (USA) (800)633-8253

Alternate Emergency Contact: PERS (International) +1 (801)629-0667

Intended Use: Industrial floor coatings.

2. Hazards Identification

GHS Classification	Placard	Key word	GHS hazard phrase
Skin Corrosion/Irritation, Category 2	Exclamation point	Warning	Causes skin irritation
Serious Eye Damage/Eye Irritation, Category 2B	none	Warning	Causes eye irritation
Skin Sensitization, Category 1B	Exclamation point	Warning	May cause an allergic skin reaction

GHS Hazard Phrases

H315 - Causes skin irritation. H320 - Causes eye irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H303 - May be harmful if swallowed.

GHS Precaution Phrases

P281 - Use personal protective equipment as required.
P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves/protective clothing/eye protection.
P261 - Avoid breathing mist/vapors.
P273 - Avoid release to the environment.

GHS Response Phrases

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P362 - Take off contaminated clothing. P332+313 - If skin irritation occurs, get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, 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.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.

GHS Storage and Disposal Phrases

P403+235 - Store in cool/well-ventilated place. P404 - Store in a closed container.

Potential Health Effects (Acute and Chronic)

Causes skin and eye irritation. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.

Inhalation

May cause respiratory irritation.

Skin Contact

Causes skin irritation.

Eye Contact

Causes eye irritation.

Ingestion

May be 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. Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-30-5	30 - 50 %
2. Rutile, tin zinc, potassium-doped	207691-99-4	20 - 35 %
3. Secondary Diamines	NA	5.0 - 15 %
4. 1,3,3-Trimethyl-N-(2-methylpropylidene)-5-[(2- methylpropylidene)amino]cyclohexanemethyla mine	54914-37-3	1.0 - 10 %
5. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite,	1318-02-1	1.0 - 10 %
6. Siloxanes and silicones, di-me, reaction products with silica	67762-90-7	1.0 - 10 %
7. Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	1.0 - 5.0 %
8. Diethyl fumarate	623-91-6	1.0 - 5.0 %

4. First Aid Measures

Emergency and First Aid Procedures

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use first aid treatment according to the nature of the injury.

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. Call a physician.

In Case of Ingestion

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Signs and Symptoms Of Exposure

Moderate irritation effect.

5. Fire Fighting Measures

Flash Pt: > 200.00 C Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data available.

Fire Fighting Instructions

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

Flammable Properties and Hazards

Product is not considered a fire hazard. Closed containers may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous Combustion Products

In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, and Amines.

Suitable Extinguishing Media

Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media

Do not use a direct water stream, which may spread fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

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

Protective Precautions, Protective Equipment and Emergency Procedures

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

Environmental Precautions

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

7. Handling and Storage

Hazard Label Information:

Avoid contact with skin and eyes. Do not get on skin and clothing. Avoid inhalation of vapor or mist. Store in a closed container.

Precautions To Be Taken in Handling

Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing.

Precautions To Be Taken in Storing

Keep container tightly closed in a dry and well-ventilated place.

Other Precautions

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-30-5	No data.	No data.	No data.

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Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
2. Rutile, tin zinc, potassium-doped	207691-99-4	No data.	No data.	No data.
3. Secondary Diamines	NA	No data.	No data.	No data.
4. 1,3,3-Trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	54914-37-3	No data.	No data.	No data.
5. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite,	1318-02-1	No data.	No data.	No data.
6. Siloxanes and silicones, di-me, reaction products with silica	67762-90-7	No data.	No data.	No data.
7. Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	No data.	No data.	No data.
8. Diethyl fumarate	623-91-6	No data.	No data.	No data.

Protective Equipment Summary - Hazard Label Information:

Neoprene gloves Safety glasses, or goggles. Impervious clothing. Chemical resistant boots

Respiratory Equipment (Specify Type)

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection

Safety glasses, or goggles.

Protective Gloves

Nitrile rubber and Neoprene are recommended.

Other Protective Clothing

Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

Work/Hygienic/Maintenance Practices

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Environmental Exposure Controls

Avoid runoff into storm sewers and ditches which lead to waterways.

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid		
Melting Point:	NE		
Boiling Point:	NE		
Decomposition Temperature:	NE		
Autoignition Pt:	No data.		
Flash Pt:	> 200.00 C	Method Used: Pensky-Marten Closed Cup	
Explosive Limits:	LEL: NE	UEL: NE	
Specific Gravity (Water = 1):	~ 1.363		

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Density: ~ 11.37 LB/GL
Vapor Pressure (vs. Air or mm Hg): NE
Vapor Density (vs. Air = 1): NE
Evaporation Rate: NE
Solubility in Water: NP

Solubility Notes

Practically insoluble.

Percent Volatile: < 5.0 % by weight.
VOC / Volume: <= 36.0000 G/L
HAP / Volume: NP
Saturated Vapor Concentration: NE

Appearance and Odor

Odor: Mild.

Appearance: Bright. yellow.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

Extreme temperatures.

Incompatibility - Materials To Avoid

Oxidizing agents, Acids, Isocyanates.

Hazardous Decomposition Or Byproducts

In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, and Amines.

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

Conditions To Avoid - Hazardous Reactions

Will not undergo hazardous polymerization in normal storage conditions.

11. Toxicological Information

Chronic Toxicological Effects

No data available.

Irritation or Corrosion

Skin Irritation. Irritating to eyes.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-30-5	n.a.	n.a.	n.a.	n.a.
2. Rutile, tin zinc, potassium-doped	207691-99-4	n.a.	n.a.	n.a.	n.a.
3. Secondary Diamines	NA	n.a.	n.a.	n.a.	n.a.
4. 1,3,3-Trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	54914-37-3	n.a.	n.a.	n.a.	n.a.
5. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite,	1318-02-1	n.a.	3	n.a.	n.a.
6. Siloxanes and silicones, di-me, reaction products with silica	67762-90-7	n.a.	n.a.	n.a.	n.a.
7. Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	n.a.	n.a.	n.a.	n.a.

SAFETY DATA SHEET

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Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
8. Diethyl fumarate	623-91-6	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information

Avoid release to the environment.

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

not reported, unknown.

13. Disposal Considerations

Waste Disposal Method

Incinerate or dispose of unused material, residues and containers in a licensed facility in accordance with all applicable local, state and federal regulations. Do not discharge substance/product into sewage system.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Not Regulated.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Not Regulated.

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name Not Regulated.

Marine Pollutant: No

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-30-5	No	No	No	No
2. Rutile, tin zinc, potassium-doped	207691-99-4	No	No	Yes-Cat. N982	No
3. Secondary Diamines	NA	No	No	No	No
4. 1,3,3-Trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	54914-37-3	No	No	No	No
5. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite,	1318-02-1	No	No	No	No
6. Siloxanes and silicones, di-me, reaction products with silica	67762-90-7	No	No	No	No
7. Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	No	No	No	No
8. Diethyl fumarate	623-91-6	No	No	No	No

Regulatory Information

SARA Section 311/312: Acute 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 Epoxy Systems, Inc. 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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