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1. Product and Company Identification

Product Code: 32A

Product Name: 32 Flexible Epoxy Coating Part A

Trade Name: 32 Flexible Epoxy Coating Part A

Manufacturer 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

Industrial floor coatings.

2. Hazards Identification

| Zi ilazarao laoritinoadon | | | | | |
|--|-------------------|----------|---|--|--|
| 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 | | |
| Aquatic Toxicity (Acute), Category 2 | none | | Toxic to aquatic life | | |
| Aquatic Toxicity (Chronic), Category 2 | Pollution | | Toxic to aquatic life with long lasting effects | | |

GHS Hazard Phrases

H315 - Causes skin irritation.

H320 - Causes eye irritation.

H317 - May cause an allergic skin reaction.

H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

GHS Precaution Phrases

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

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

P262 - Do not get in eyes, on skin, or on clothing.

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

P273 - Avoid release to the environment.

GHS Response Phrases

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention.

P362 - Take off contaminated clothing.

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+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable

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for breathing. P314 - Get medical attention/advice if you feel unwell.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER or doctor/physician.

P391 - Collect spillage.

GHS Storage and Disposal Phrases

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

Potential Health Effects (Acute and Chronic)

May cause eye irritation. May cause skin 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.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

| 3. Composition/Information on Ingredients | | | | | |
|---|---------------------------------|------------|---------------|--|--|
| Hazard | dous Components (Chemical Name) | CAS# | Concentration | | |
| 1. Bis | sphenol-a based epoxy resin | 25068-38-6 | 60 - 75 % | | |
| 2. Ph | enol, 4-nonyl-, branched | 84852-15-3 | 15 - 25 % | | |
| 3. Tit | anium dioxide | 13463-67-7 | 0 - 5.0 % | | |
| 4. Iro | n oxide (Fe2O3) | 1309-37-1 | 0 - 5.0 % | | |
| 5. C.I | I. Pigment Yellow 42 | 51274-00-1 | 0 - 5.0 % | | |
| 6. Ca | arbon black | 1333-86-4 | 0 - 0.60 % | | |
| | | _ | | | |

4. First Aid Measures

Emergency and First Aid Procedures

In Case of Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

In Case of Skin Contact

In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

In Case of Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting. For further assistance, contact your local Poison Control Center.

Signs and Symptoms Of Exposure

Moderate irritation effect.

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5. Fire Fighting Measures

Flash Pt: > 200.00 F Method Used: Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data available.

Fire Fighting Instructions

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Flammable Properties and Hazards

Combustible material: may burn but does not ignite readily. Container may explode in heat of fire.

Hazardous Combustion Products

Hazardous decomposition products formed under fire conditions. Carbon dioxide, Carbon monoxide, Phenolics.

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** Bisphenol-a based epoxy resin 25068-38-6 No data. No data. No data. Phenol, 4-nonyl-, branched 84852-15-3 No data. No data. No data. No data. 3. Titanium dioxide 13463-67-7 15 (dust) mg/m3 10 mg/m3 No data. Iron oxide (Fe2O3) 5 mg/m3 (dust & fume) 1309-37-1 10 mg/m3 No data. 5. C.I. Pigment Yellow 42 51274-00-1 No data. No data. No data. 6. Carbon black 1333-86-4 3.5 mg/m3 3.5 mg/m3

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

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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. May be hazardous to the environment if released in large quantities.

| 9. Physical and Chemical Propertie |
|------------------------------------|
|------------------------------------|

Physical States: [] Gas [X] Liquid [] Solid

Melting Point:

Boiling Point:

NE

Decomposition Temperature:

NE

Autoignition Pt: No data.

Flash Pt: > 200.00 F Method Used: Closed Cup

Explosive Limits: LEL: NE UEL: NE

Specific Gravity (Water = 1): ~ 1.10 - 1.127 **Density:** ~ 9.2 - 9.4 LB/GL

Vapor Pressure (vs. Air or mm Hg): NE
Vapor Density (vs. Air = 1): NE
Evaporation Rate: NE
Solubility in Water: No data.

Solubility Notes

Practically insoluble.

Percent Volatile: 0.0 % by volume.

VOC / Volume: NP
HAP / Volume: NP
Saturated Vapor Concentration: NE

Appearance and Odor

Slight odor.

Appearance: Liquid. (various pigmented colors)

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10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Reactivity

Avoid: acids, alkalis, oxidizing agents.

Conditions To Avoid - Instability

Extreme temperatures. Avoid uncontrolled contact with amines.

Incompatibility - Materials To Avoid

Avoid strong acids, bases, and oxidizing agents.

Hazardous Decomposition Or Byproducts

Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide, Phenolics.

Possibility of Hazardous

Will occur [] Will not occur [X]

Polymerization:

Conditions To Avoid - Hazardous Reactions

Will not undergo hazardous polymerization in normal storage conditions.

11. Toxicological Information

Toxicological Information

May cause sensitization by skin contact.

Chronic Toxicological Effects

Skin sensitization.

Irritation or Corrosion

Skin Irritation. Irritating to eyes.

Symptoms related to Toxicological Characteristics

May cause redness, rash on skin.

Carcinogenicity/Other Information

California Safe Drinking Water and Toxics Enforcement Act of 1986

(Proposition 65): "Carbon black (airborne, unbound particles of respirable size)" is a California Proposition 65 listed substance. All three listing qualifiers (airborne, unbound (not bound within a matrix), and respirable size (10 micrometers or less in diameter)) must be met for this substance to be considered a Proposition 65 listed substance.

| На | zardous Components (Chemical Name) | CAS# | NTP | IARC | ACGIH | OSHA |
|----|------------------------------------|------------|------|------|-------|------|
| 1. | Bisphenol-a based epoxy resin | 25068-38-6 | n.a. | n.a. | n.a. | n.a. |
| 2. | Phenol, 4-nonyl-, branched | 84852-15-3 | n.a. | n.a. | n.a. | n.a. |
| 3. | Titanium dioxide | 13463-67-7 | n.a. | 2B | A4 | n.a. |
| 4. | Iron oxide (Fe2O3) | 1309-37-1 | n.a. | 3 | A4 | n.a. |
| 5. | C.I. Pigment Yellow 42 | 51274-00-1 | n.a. | n.a. | n.a. | n.a. |
| 6. | Carbon black | 1333-86-4 | n.a. | 2B | A4 | n.a. |

12. Ecological Information

General Ecological Information

Avoid release to the environment. May be hazardous to the environment if released in large quantities.

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

Not readily biodegradable.

Bioaccumulative Potential

No data available.

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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 (Non-Bulk)

Not Regulated.

(Bulk)

PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or

aircraft.

DOT Hazard Class: 9

DOT Hazard Label: CLASS 9
UN/NA Number: UN3082

Packing Group:

Precautionary Label Avoid skin and eye contact. May cause eye and skin irritation. May cause skin

sensitization. Wear protective equipment and clothing. Always read MSDS/SDS

before use.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name

(Non-Bulk)

Not Regulated.

(Bulk)

PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or

aircraft.

UN Number: 3082

Hazard Class: 9 - CLASS 9

Packing Group:

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name

PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

Note: The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. Shipment compliance is the responsibility of the person

offering the product for transport.

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UN Number: Hazard 3082

Class: Packing 9 - CLASS 9

Group: IMDG EMS III

Number: Marine FA-SF
Pollutant: Yes

15. Regulatory Information

US EPA SARA Title III

| Ha | zardous Components (Chemical Name) | CAS# | Sec.302 (EHS) | Sec.304 RQ | Sec.313 (TRI) | Sec.110 | |
|----|------------------------------------|------------|---------------|------------|---------------|---------|--|
| 1. | Bisphenol-a based epoxy resin | 25068-38-6 | No | No | No | No | |
| 2. | Phenol, 4-nonyl-, branched | 84852-15-3 | No | No | No | No | |
| 3. | Titanium dioxide | 13463-67-7 | No | No | No | No | |
| 4. | Iron oxide (Fe2O3) | 1309-37-1 | No | No | No | No | |
| 5. | C.I. Pigment Yellow 42 | 51274-00-1 | No | No | No | No | |
| 6. | Carbon black | 1333-86-4 | 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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