

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **QuakeBond™ 220UR Epoxy Resin (Part “A”)**

CHEMICAL FAMILY: Epoxy Resin Mixture

SUPPLIER'S NAME: QuakeWrap, Inc., 2055 E. 17th Street, Tucson, AZ 85719

EMERGENCY PHONE: 800/535-5053 (Infotrac) GENERAL INFORMATION: (866) QuakeWrap [782-5397]

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT	CAS #	EXPOSURE LIMITS
N-Butyl Glycidyl Ether	2426-08-6	ACGIH TLV 25ppm
Microcrystalline Silica, Tripoli	1317-95-9	ACGIH TLV 0.1 mg/cu.m
Titanium Dioxide	13463-67-7	OSHA PEL 15.0 mg/cu.m
Hydrous Magnesium Silicate	14807-96-6	ACGIH TLV 2.0 mg/cu.m

Contains other ingredients and pigments which should be treated as nuisance dust - TLV - 10 mg/cu.m, 8 hr. TWA (total dust)

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Viscous resinous material with mild characteristic odor. Color indicated on label. Eye and skin irritant. May cause sensitization and dermatitis. Avoid contact with eyes, skin and clothing.

POTENTIAL HEALTH EFFECTS:

EYE:

- May cause mild to moderate eye irritation.

SKIN:

- May cause skin irritation. May cause sensitization and dermatitis.

INGESTION:

- Swallowing large amounts may cause injury and GI tract irritation.

INHALATION:

- May cause nasal irritation. Prolonged overexposure may cause central nervous system depression or lung injury.

CHRONIC EFFECTS:

- Contains Microcrystalline Silica. Inhalation of silica dust (respirable) may cause delayed lung injury or disease. The International Agency for Research on Cancer (IARC) has evaluated that there is “sufficient evidence” that Microcrystalline Silica can cause cancer in laboratory animals and there is “limited evidence” with respect to humans. IARC Monograph: Level 2A Grouping. Take appropriate measures to avoid breathing spray during application or removal of cured product by use of NIOSH approved respirator.

Section 4: FIRST AID MEASURES

◆USE APPROPRIATE BLOOD-BORNE PATHOGENS PROTECTIONS◆

EYE:

- Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure rinsing of entire eye surface and lids with water.

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SKIN:

- Promptly wipe clean with paper or cloths and wash with soap and water. Remove and wash any contaminated clothing before reuse.

INGESTION:

- If QuakeBond™ 220UR Part A is swallowed, promptly induce vomiting and get medical attention. Do not give anything by mouth to an unconscious or convulsing person. If mixed product (QuakeBond™ 220UR Part A and Part B) is swallowed, do not induce vomiting and get immediate medical attention.

INHALATION:

- If ill effects occur, remove to fresh air. Keep warm and quiet and get medical attention promptly.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties:

- FLASHPOINT: > 173°F (78°C) Method: CC

HAZARDOUS COMBUSTION PRODCUTS:

- Carbon monoxide, carbon dioxide and aldehydes.

EXTINGUISHING MEDIA:

- Foam, carbon dioxide, dry chemical or water spray.

FIRE FIGHTER INSTRUCTIONS:

- Firefighter should wear goggles and self contained breathing apparatus to avoid inhalation.

Section 6: ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

- Absorb spill with suitable absorbent material (dry sand, earth) and shovel into closed containers for disposal. Flush contaminated area with water.

LARGE SPILL:

- Dike area and pump into closed containers. Prevent runoff from entering into storm sewers and ditches that could lead to natural waterways. Wear protective equipment during cleanup.

Section 7: HANDLING AND STORAGE

HANDLING:

- This material may cause sensitization. Do not get in eyes, on skin or clothing. Do not allow contaminated clothing to come in contact with skin. Avoid contact with vapors and fumes. Wear protective equipment.

STORAGE:

- Store in closed containers in a cool, dry place. Avoid heat and warm storage areas.

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS:

- Control airborne concentrations below the exposure limits. Use only with adequate ventilation. Local exhaust and general ventilation is recommended.

RESPIRATORY PROTECTION:

- NIOSH approved respirator suitable for organic vapors if TLV is exceeded.

SKIN PROTECTION:

- Chemical-resistant plastic or rubber gloves. Wear protective equipment as required to prevent wetting the skin or clothing.

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EYE PROTECTION:

- Chemical splash goggles.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A

VAPOR DENSITY: Non-Volatile

SOLUBILITY IN WATER: Insoluble

ODOR: Mild, characteristic odor

MELT POINT: N/A

% VOLATILES: NIL

SPECIFIC GRAVITY: 1.55

APPEARANCE: Resinous, viscous liquid.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: (CONDITIONS TO AVOID)

- Keep away from heat and warm storage areas.

INCOMPATIBILITY:

- Strong oxidizers, acids, alkalis and epoxy hardeners under uncontrolled conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, aldehydes.

Section 11: TOXICOLOGICAL INFORMATION

N/A

Section 12: ECOLOGICAL INFORMATION

N/A

Section 13: DISPOSAL CONSIDERATIONS

Care should be taken to ensure that the material or its containers are disposed of in an approved facility in accordance with current federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

Not regulated by DOT

Section 15: REGULATORY INFORMATION

OSHA:

- 29 CFR 1910.1200 Hazardous by definition of Hazard Communication Standard

SARA SECTION 313 LISTED INGREDIENTS:

- This product does not contain any substances that are subject to the reporting requirements of 40 CFR 372.

Section 16: OTHER INFORMATION

ABBREVIATIONS: N/A = not applicable; N.D.A. = no data available; NE = not established

END OF MSDS

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MATERIAL SAFETY DATA SHEET (MSDS)

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **QuakeBond™ 220UR Epoxy Resin (Part “B”)**

CHEMICAL FAMILY: Epoxy Resin Mixture

SUPPLIER'S NAME: QuakeWrap, Inc., 2055 E. 17th Street, Tucson, AZ 85719

EMERGENCY PHONE: 800/535-5053 (Infotrac) GENERAL INFORMATION: (866) QuakeWrap [782-5397]

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT	CAS #	EXPOSURE LIMITS
Alkyl Amines/Amine Epoxy Adducts	Proprietary	None Assigned
Epoxy Resin	Proprietary	None Assigned
Benzyl Alcohol	100-51-6	None Assigned
Phenol	108-95-2	ACGIH TLV 5 ppm Skin
Microcrystalline Silica, Tripoli	1317-95-9	ACGIH TLV 0.1 mg/cu.m
Hydrous Magnesium Silicate	14807-96-6	ACGIH TLV 2.0 mg/cu.m

Contains other ingredients which should be treated as nuisance dust - TLV - 10 mg/cu.m, 8 hr. TWA (total dust)

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Viscous beige liquid with mild characteristic amine odor. Causes severe eye irritation. Causes skin irritation. May cause allergic skin reaction and sensitization. Avoid contact with eyes, skin or clothing. Avoid breathing mist or spray.

POTENTIAL HEALTH EFFECTS:

EYE:

- Causes severe eye irritation.

SKIN:

- May cause moderate to severe skin irritation. May cause allergic skin reaction and sensitization.

INGESTION:

- Substance is extremely harmful if swallowed.

INHALATION:

- Prolonged or repeated inhalation may cause lung damage or respiratory irritation. Avoid breathing mist or spray.

CHRONIC EFFECTS:

- Contains Microcrystalline Silica. Inhalation of silica dust (respirable) may cause delayed lung injury or disease. The International Agency for Research on Cancer (IARC) has evaluated that there is "sufficient evidence" that Microcrystalline Silica can cause cancer in laboratory animals and there is "limited evidence" with respect to humans. IARC Monograph: Level 2A Grouping. Take appropriate measures to avoid breathing spray during application or removal of cured product by use of NIOSH approved respirator.

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Section 4: FIRST AID MEASURES

◆USE APPROPRIATE BLOOD-BORNE PATHOGENS PROTECTIONS◆

EYE:

- Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure rinsing of entire eye surface and lids with water. If physician is not available, continue flushing for an additional 15 minutes. Get immediate medical attention.

SKIN:

- Immediately remove contaminated clothing and shoes. Wash affected areas with mild soap and water for at least 15 minutes. Get medical attention if necessary. Discard or decontaminate clothing before re-use.

INGESTION:

- If QuakeBond™ 220UR Part B is swallowed, immediately give at least 3 - 4 glasses of water, but do not induce vomiting. If vomiting occurs, give fluids again. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. If mixed product (QuakeBond™ 220UR Part A and Part B) is swallowed, do not induce vomiting and get immediate medical attention.

INHALATION:

- If ill effects occur, remove to fresh air. If breathing is difficult, get immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties:

- FLASHPOINT: > 200°F (93°C) Method: CC

HAZARDOUS COMBUSTION PRODCUTS:

- Carbon monoxide, carbon dioxide and aldehydes, nitrogen oxides.

EXTINGUISHING MEDIA:

- Foam, carbon dioxide, dry chemical or water spray.

FIRE FIGHTER INSTRUCTIONS:

- Firefighter should wear goggles and self contained breathing apparatus to avoid inhalation of hazardous combustion products.

Section 6: ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

- Avoid personal contact. Absorb spill with suitable absorbent material (dry sand, earth) and shovel into closed containers. Flush contaminated areas with water.

LARGE SPILL:

- Ventilate area. Avoid personal contact. Dike area and pump into closed containers. Prevent runoff from entering into storm sewers and ditches that could lead to natural waterways. Wear protective equipment during cleanup.

Section 7: HANDLING AND STORAGE

HANDLING:

- Avoid personal contact. Do not get in eyes, on skin or clothing. Do not allow contaminated clothing to come in contact with skin. Avoid contact with vapors and fumes. Wear protective equipment and wash thoroughly with mild soap and water after handling.

STORAGE:

- Store in tightly closed containers in a cool, dry place. Avoid heat and warm storage areas.

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Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS:

- Control airborne concentrations below the exposure limits. Use only with adequate ventilation. Local exhaust and general ventilation is recommended.

RESPIRATORY PROTECTION:

- NIOSH approved respirator suitable for organic vapors if TLV is exceeded.

SKIN PROTECTION:

- Chemical-resistant plastic or rubber gloves. Wear protective equipment as required to prevent wetting the skin or clothing.

EYE PROTECTION:

- Chemical splash goggles or full face shield is recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A

VAPOR DENSITY: Non-Volatile

SOLUBILITY IN WATER: Very slight

ODOR: Mild, amine odor

MELT POINT: N/A

% VOLATILES: NIL

SPECIFIC GRAVITY: 1.21

APPEARANCE: Beige viscous liquid.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: (CONDITIONS TO AVOID)

- Keep away from heat and warm storage areas. Stable.

INCOMPATIBILITY:

- Strong oxidizers, acids, alkalies and epoxy resins under uncontrolled conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

Section 11: TOXICOLOGICAL INFORMATION

N/A

Section 12: ECOLOGICAL INFORMATION

N/A

Section 13: DISPOSAL CONSIDERATIONS

Care should be taken to ensure that the material or its containers are disposed of in an approved facility in accordance with current federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

Not regulated by DOT
Not regulated by IATA
Not regulated by IMO

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Section 15: REGULATORY INFORMATION

OSHA:

- Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA SECTION 313 LISTED INGREDIENTS:

- This product contains a substances that is subject to the reporting requirements of 40 CFR 372.
20% Phenol CAS#108-95-2

Section 16: OTHER INFORMATION

ABBREVIATIONS: N/A = not applicable; N.D.A. = no data available; NE = not established

END OF MSDS

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