



S A F E T Y   D A T A   S H E E T

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME : QuakeBond 220UR A Underwater Resin  
 IDENTIFICATION NUMBER: QuakeBond 220UR A  
 PRODUCT USE/CLASS : Epoxy Resin

Supplier:  
 QuakeWrap, Inc.  
 6840 S Tucson Blvd.  
 Tucson, AZ 85756  
 EMERGENCY: 800-535-5053 / 1-352-323-3500 (outside USA)  
 INFORMATION: 520-791-7000  
 DATE GENERATED: 11/19/2015

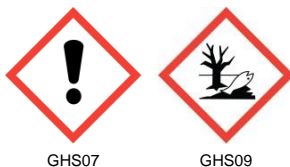
SECTION 2 - HAZARDS IDENTIFICATION

Skin Irrit. 2 H315 - Causes skin irritation  
 Eye Irrit. 2A H319 - Causes serious eye irritation  
 Skin Sens. 1 H317 - May cause an allergic skin reaction  
 Aquatic Acute 2 H401 - Toxic to aquatic life  
 Aquatic Chronic 2 H411 - Toxic to aquatic life with long lasting effects

**2.2. Label elements**

**GHS-US labeling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P264 - Wash all contact areas thoroughly after handling  
 P272 - Contaminated work clothing must not be allowed out of the workplace  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection.  
 P302+P352 - If on skin: Wash with plenty of mild soap and water  
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P337+P313 - If eye irritation persists: Get medical advice/attention  
 P362+P364 - Take off contaminated clothing and wash it before reuse  
 P391 - Collect spillage  
 P501 - Dispose of contents/container to special waste facility in accordance with regional/national regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAME	WT %
25068-38-6	Epoxy resin	60 - 99%



SECTION 4 - FIRST AID MEASURES

**EYE CONTACT:** Flush eye with water for 15 minutes. Get medical attention.

**SKIN CONTACT:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INHALATION:** If symptoms occur, remove to fresh air. Medical personnel may administer oxygen if breathing is difficult. Seek medical attention if symptoms persist.

**INGESTION:** If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**NOTES TO PHYSICIAN:** Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** ALCOHOL FOAM, CO2, DRY CHEMICAL, FOAM, WATER FOG

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers may rupture or explode (due to pressure build-up) when exposed to extreme heat. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

**SPECIAL FIREFIGHTING PROCEDURES:** Use NIOSH-approved self-contained breathing apparatus and full protective clothing. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** SMALL SPILL - Wear gloves and goggles. See Section 8 for type. LARGE SPILL - Wear gloves, boot covers, synthetic apron, and goggles. See Section 8 for type.

**ENVIRONMENTAL PRECAUTIONS:** Prevent entry into drains and/or waterways. Keep off of soil.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Mark area and keep unnecessary personal away from spill area. Reclaim clean material. Absorb with inert material, such as clay. Sweep or shovel into loosely-covered waste container and remove to appropriate waste area. Dispose of in accordance with federal, state, and local regulations. Contact manufacturer for further instructions.

SECTION 7 - HANDLING AND STORAGE

**HANDLING:**

Avoid contact with eyes, skin, and clothing. Remove contaminated clothing and wash before reuse. Contaminated leather articles should be disposed of. If product is heated, process with local ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. DO NOT reuse empty container without commercial clean or recondition. FOR INDUSTRIAL USE ONLY.

**STORAGE:** Store indoors in a cool dry place under ambient conditions. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE LIMITS**

CAS NUMBER	ACGIH		OSHA		SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	
25068-38-6	N.E.	N.E.	N.E.	N.E.	NO

\* (TD) = Total Dust    \* (RD) = Respirable Dust

CAS NUMBER	OEL			
	8 HR	15 MIN	IDLH	OTHER LIMIT (SOURCE)
25068-38-6	N.E.	N.E.	N.E.	N.E.

\* (TD) = Total Dust    \* (RD) = Respirable Dust



**ENGINEERING CONTROLS:** Local exhaust as needed to control vapor or dust levels to below lowest component safe exposure limit.

**PERSONAL PROTECTIVE EQUIPMENT:** Clean clothing to cover skin. Eye wash and safety shower.

**RESPIRATORY PROTECTION:** If TLV/PEL is exceeded, if use is performed in a poorly-ventilated space, or if inhalation effects occur, use approved vapor cartridge respirator in accordance with applicable health and safety regulations and manufacturer's recommendations.

**SKIN PROTECTION:** Butyl rubber gloves. Nitrile gloves. Supported PVA gloves.

**EYE PROTECTION:** Chemical splash goggles.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT (DEG C): > 100  
 AUTOIGNITION TEMPERATURE : No Data  
 LOWER FLAMMABILITY/EXPLOSION LIMIT : No Data  
 UPPER FLAMMABILITY/EXPLOSION LIMIT : No Data

PHYSICAL STATE : Paste  
 SPECIFIC GRAVITY : 1.198  
 APPEARANCE : Off-white  
 ODOR : Mild nondescript  
 ODOR THRESHOLD : No data  
 SOLUBILITY IN H<sub>2</sub>O : Insoluble  
 pH @ 100 % : N/A  
 BOILING POINT : No Data  
 MELTING/FREEZE POINT: No Data  
 VAPOR DENSITY : Lighter than Air  
 VAPOR PRESSURE : No Data  
 EVAPORATION RATE : Is slower than n-Butyl Acetate  
 PARTITION COEFFICIENT (log Pow): No Data

SECTION 10 - STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Prolonged exposure to heat may cause separation.  
**INCOMPATIBILITY/MATERIALS TO AVOID:** Strong bases or oxidants. Strong Lewis or mineral acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon.

**HAZARDOUS REACTIONS:** Will not occur under normal conditions. Reaction with amines in large amounts or under uncontrolled conditions produces considerable heat and may release noxious fumes/smoke.

**CONDITIONS TO AVOID:** This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

**COMPONENT TOXICOLOGICAL INFORMATION**

Bisphenol-A Epoxy resin (25068-38-6)	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

**ACUTE EFFECTS - EYE:**  
 Irritating, but will not permanently injure eye tissue. Contact may cause tearing, redness and swelling.

**ACUTE EFFECTS - SKIN:**  
 Moderate irritant. Prolonged contact may cause dermatitis. Strong dermal sensitizer; repeated contact may cause allergic reaction with redness and rash.

**ACUTE EFFECTS - INHALATION:**  
 Inhalation of vapors from heated material may cause respiratory tract irritation.



**ACUTE EFFECTS - INGESTION:**

May cause nausea and vomiting.  
 Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

**CHRONIC OVEREXPOSURE/OTHER INFORMATION:**

\*Contact or Overexposure may aggravate pre-existing dermatological conditions.

SECTION 12 - ECOLOGICAL INFORMATION

**12.1. Toxicity**

Ecology - water : Toxic to aquatic life with long lasting effects.

<b>Bisphenol-A Epoxy resin (25068-38-6)</b>	
LC50 fish 1	2 mg/l (96 h; Oncorhynchus mykiss; Lethal)
EC50 Daphnia 1	2.8 mg/l (48 h; Daphnia magna; Locomotor effect)
LC50 fish 2	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
EC50 Daphnia 2	(48 h; Daphnia magna; Locomotor effect)
ErC50 (algae)	11 mg/l Scenendesmus Growth rate inhibition carpicornrutum (fresh water algae)

**12.2. Persistence and degradability**

<b>efi Polymers Epoxy Resin 20230 (None - mix)</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.

<b>Bisphenol-A Epoxy resin (25068-38-6)</b>	
Persistence and degradability	Not readily biodegradable in water. Hydrolysis in water. Low potential for adsorption in soil.

**12.3. Bioaccumulative potential**

<b>efi Polymers Epoxy Resin 20230 (None - mix)</b>	
Bioaccumulative potential	Not established.

<b>Bisphenol-A Epoxy resin (25068-38-6)</b>	
BCF other aquatic organisms 1	3 - 31
Log Pow	3.242
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

**12.4. Mobility in soil**

<b>Bisphenol-A Epoxy resin (25068-38-6)</b>	
Surface tension	0.0 587-0.0589,20 °C

**12.5. Other adverse effects**

Effect on global warming : No known ecological damage caused by this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Review all current federal, state, and local regulations regarding health and disposal for appropriate disposal procedures. For small amounts, mix resin and hardener according to product directions and allow to harden. When cured, product is non-hazardous, and may be placed in industrial or municipal landfill if local regulations permit. Material "as sold" is not regulated as a hazardous waste under federal RCRA regulations. DO NOT landfill free liquid. Fuels blending or incineration of free liquid recommended if permitted.

SECTION 14 - TRANSPORTATION INFORMATION

INTERNATIONAL SHIPPING NAME: Not considered a dangerous good for transport by ground in the U.S.

Not considered a Dangerous Good in containers 5L or less

MARINE/AIR INTERNATIONAL: Environmentally Hazardous Substance, Liquid, nos  
 (Bisphenol-A Epoxy Resin)

ID NUMBER: UN3082



PACKING GROUP: III
PRIMARY HAZARD CLASS: 9
HAZARD SUBCLASS: N/A
INTERNATIONAL EMS NO: F-A, S-F
NA EMERGENCY RESPONSE GUIDE NO: N/A

SECTION 15 - REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65 STATEMENT: Contains silicon dioxide (quartz), a substance listed by the State of California as known to cause cancer.

CERCLA - SARA HAZARD CATEGORY: This product has been reviewed, and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD

SARA SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 and 40 CFR part 372: NONE

TOXIC SUBSTANCES CONTROL ACT: COMPONENTS SUBJECT TO SECTION 4 TESTING/SNUR: None
SECTION 8 INVENTORY: The chemical substances in this product are on the TSCA Section 8 Inventory.
SECTION 12(B) EXPORT REPORTING: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States: none

COMPONENT RCRA CODES: NONE CERCLA RQ VALUE (MINIMUM): NONE

REACH SUBSTANCE(S) OF VERY HIGH CONCERN: None added or known to be present.

RoHS SUBSTANCE(S): None added or known to be present.

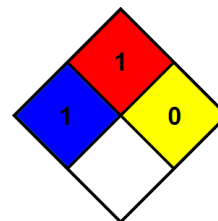
ODS/MONTREAL PROTOCOL SUBSTANCE(S): None added or known to be present.

PRODUCT/TOTAL VOC (CALCULATED): 0 grams/ltr
COATING/REGULATORY VOC (less water and exempt solvents - calculated): 0 g/l

SECTION 16 - OTHER INFORMATION

NFPA RATINGS - HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 1 - Must be preheated before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



ABBREVIATIONS:
N.A. - Not Applicable
N.E. - Not Established
N.D. - Not Determined
ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = US Occupational Health and Safety Administration
TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hrs)
STEL = Short-Term Exposure Limit (15 min)
C = Ceiling Value
PEL = Permissible Exposure Limit
OEL = Occupational Exposure Limit
IDLH = Immediately Dangerous to Life and Health

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