

**Section 1. Product and Company Identification**

**Product Name:** Pentra-Sil™ 244+



Irritant

**Product use:** Concrete chemical hardener, sealer and densifier.

**Effective Date:** April 19, 2010

**Manufacturer Information:** Advanced Concrete Technologies, LLC  
 115 North 1380 West  
 Orem, UT 84057  
 Telephone number: 801-375-2280

**USA Emergency Phone Number:**

**INFOTRAC (24-hr/7 days): 1-800-535-5053**  
**Outside the United States call collect 1-352-323-3500**  
**For Medical Emergency - Call 1-800-535-5053**

**Section 2. Ingredients and Hazards Identification**

<b>Hazardous Components</b>					
<b>Component</b>	<b>CAS #</b>	<b>EINECS No</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>Percent</b>
Water	7732-18-5	231-791-2	NA	NA	45-55
Proprietary A	NA	NA	NA	NA	35-45
Proprietary B	NA	NA	NA	NA	15-25
Proprietary C	NA	NA	NA	NA	1 - 8
Proprietary D	NA	NA	NA	NA	5 - 7
None of the compounds contain carcinogens, Prop. 65, SARA 313 listings and are non-hazardous and non-flammable.					

**Potential Acute Health Effects:**

Eyes: Causes eye irritation  
 Skin: Expected to cause irritation to the skin  
 Inhalation: Vapors may cause respiratory irritation  
 Ingestion: May be harmful.

**Section 3. Hazard Identification**

The primary routes of entry are eyes, skin and respiratory.  
 Immediate Health Effects:  
 Eye Contact: Causes irritation.  
 Skin: Contact with the skin is expected to cause irritation  
 Ingestion: May cause headache, dizziness, nausea and vomiting.  
 Inhalation: The vapor or fumes from this product may cause respiratory irritation.  
 Delayed or other Health Effects: None determined.  
 Target Organs: None determined.

**Section 4. First Aid Measures**

**Eye Contact:** Flush eyes with water immediately while holding eyelids open. Remove contacts, if worn, after initial flushing and continue flushing for at least 15 minutes. Seek medical attention if irritation persists.  
**Skin Contact:** Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse.  
**Inhalation:** Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult administer oxygen. Seek medical attention if breathing is still difficult.

Ingestion: If swallowed, get medical attention immediately. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

### Section 5. Fire Fighting Measures

Flash Point: Not flammable

Flammability Limits: NE

Fire Fighting Media: Dry chemical, carbon dioxide, and water spray.

Special Fire Fighting Procedures: First responders need to wear full-bunker gear with SCBA, never enter a confined space unless fully protected with proper personal protective equipment (PPE).

### Section 6. Accidental Release Measures

Clean-up Procedures: Wear proper PPE. Stop the source of the release if you are not put at risk. Use absorbent material to absorb the spill, use plastic shovel to pick up absorbent for disposal.

Spills and Leaks: Dispose in accordance to local, state or federal regulations.

### Section 7. Handling and Storage

Handling: Do not get into eyes. Do not taste or swallow. Wash thoroughly after handling.

Storage: Store in original labeled container. Keep in cool and dry areas.

### Section 8. Exposure Control/Personal Protection

Introductory Remarks: Consider the potential hazards of this product outlined in section 3. Use process exposures such as local exhaust ventilation, to control over exposure to airborne levels above recommended exposure limits.

Personal Protection:

Eyes: Wear safety goggles or safety glasses to prevent eye contact.

Body: Long sleeve shirts, long pants, socks, rubber boots and chemical resistant gloves.

Hands: Chemical resistant gloves

Respiratory: Wear an approved respirator that provides protection from this product if the airborne concentrations exceed the recommended exposure limits.

Other: None

### Section 9. Physical and Chemical Properties

<b>Odor/Color</b>	Odorless & clear (reddish tint) liquid	<b>Vapor Pressure</b>	> 2.2 torr @ 68 °F (20 °C)
<b>pH</b>	11.0	<b>Vapor Density(air=1)</b>	> 1.0
<b>VOC</b>	< 50 g/L	<b>Solubility</b>	95 % in water
<b>Evaporation rate(water=1)</b>	> 1.0	<b>Boiling Point</b>	212 °F (100 °C)

### Section 10. Stability and Reactivity

**Chemical Stability:** Considered stable under normal ambient temperatures.

**Hazardous Decomposition:** If complete combustion oxides of carbon and silicate are formed.

**Hazardous Polymerization:** Will not occur

**Incompatibility~ Materials to Avoid:** May react with strong oxidizers and strong acids. Extreme temperatures and freezing must be avoided.

### Section 11. Toxicological Information

**Acute Eye Irritation:** Irritating

**Acute Skin Irritation:** Chronic exposure may be irritating

**Acute Dermal Toxicity:** Not expected to be toxic through the skin.

**Acute Inhalation Toxicity:** Not determined, expected to be an irritant to the respiratory system.

**Carcinogenic Effects:** None

**Existing Medical Conditions Aggravated by Exposure:** Exposure to eyes and skin may cause irritation to pre-existing conditions.

### Section 12. Ecological Information

**Ecotoxicity:** The toxicity of this product has not been determined.

**Environmental Fate:** This product should be expected to be readily bio-degradable.

### Section 13. Disposal Considerations

**Waste Disposal Method:** What ever cannot be saved for recovery or recycling should be managed by the local, state or Federal Regulations.

**Container Handling and Disposal:** All containers should be triple rinsed and disposed of according to local, state and Federal regulations.

### Section 14. Transport Information

**Ground Classification:** Not regulated by US DOT

**Shipping Name:** Pentra-Guard® (HP)

**Technical Shipping Name:** None

**UNFIC:** None

**ID Number:** None

**Packaging Group:** None

**Labels:** No US DOT Labels

**Not regulated by IATA or IMO**

### Section 15. Regulatory Information

EPCRA 311/312 Categories: Immediate (Acute) Health Effects:	Yes
Delayed (Chronic) Health Effects:	Yes
Fire Hazard:	No
Sudden Release of Pressure	No
Reactivity:	No

Right to know classification: None listed in CA, PA, MN, MA, MI, FL and NJ.

TSCA: None.

Reportable Quantity (RQ): None

Prop. 65: Not listed

WHMIS: XI (Irritant to the eyes and skin)

None listed chemical inventories of ACIS, ECL, EEC, ENCS, EU, Israel, MAC, MAK, MITI, PICCS, SWISS, Taiwan, USA and UK

Abbreviations:

AICS	Australian Inventory of Chemical Substances
CAS #	Chemical Abstract Service Number
°C	Celsius temperature scale
°F	Fahrenheit temperature scale
ECL	Korean Existing Chemicals List
EEC	European Economic Commission
ENCS	Japanese Existing and New Chemical List

EINECS #	European Inventory of Existing Chemical Substances Number
EU	European Union
(Israel)	2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations List
MAC	Netherlands
MAK	Germany
MITI	Ministry of International trade and Industry
NA	Not applicable
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PPE	Personal Protective Equipment
Prop.	Proprietary
NA	Not applicable
ND	Not determined
STEL	Short Term Exposure Limit
SWISS	Giftliste 1
SWISS	Inventory of Notified New Substances
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
(Taiwan)	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of 1086
USA	United States of America
UK	United Kingdom

**Section 16. Other Information**

**Hazardous Material Information (HMIS)**

**National Fire Protection Association (NFPA)**

Health	1	1	Health
Fire	0	0	Fire
Reactivity	0	0	Instability
Personal Protection	C		NA

Health 4 Deadly 3 Extreme Danger 2 Dangerous 1 Slight hazard 0 No hazard  
 Fire 4 < 73 °C 3 < 100 °C 2 < 200 °C 1 >200 °C 0 Will not burn  
 Reactivity/Instability 4 – May detonate 3 Explosive 2 Unstable 1 Normally stable 0 Stable

**Risk phrases:** R36, Irritating to eyes; R37, Irritating to respiratory system; and R38, Irritating to skin.  
**Safety phrases:** S2, Keep out of reach of children; S24, Avoid contact with skin; S25, Avoid contact with eyes; S37, Wear suitable gloves; and S39, Wear eye/face protection.

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