

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PENTRA - SIL™ 244 +

GENERAL USE: Concrete sealer

PRODUCT DESCRIPTION: Clear, alkali, water-based liquid, slight odor, reddish tint.

MANUFACTURER'S NAME

Advanced Concrete Technologies, LLC

ADDRESS (NUMBER, STREET, P.O. BOX)

450 South 1325 West

(CITY, STATE AND ZIP CODE)

Orem, UT 84058

COUNTRY

USA

DATE PREPARED: January 28, 2009

SUPERSEDES: May 21, 2006

TELEPHONE NUMBER FOR INFORMATION

(801) 375-2280

EMERGENCY TELEPHONE NUMBER

Infotrac (800) 535-5053 Outside USA (352) 323-3500

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SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Alkaline liquid, prolonged contact may cause skin & eye irritation. Ingestion may cause gastric distress. Hazard Symbols for this product - Xi, Risk Phrases - R36/38

POTENTIAL HEALTH EFFECTS

INHALATION: Breathing concentrated vapors may cause irritation of respiratory tract.

SKIN: Prolonged contact may cause irritation.

EYES: Contact with eyes will cause irritation.

INGESTION: May cause gastric distress, vomiting and diarrhea.

CARCINOGENICITY

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	EINECS #	%(by weight)	OSHA PEL		ACGIH TWA		RQ LBS
				PPM	MG/M3	PPM	MG/M3	
Proprietary Ingredient A (*, a)	Not specified	Not specified	5 - 10					1*
Proprietary Ingredient B (a)	Not specified	Not specified	1 - 5					not established
Proprietary Ingredient C (a)	Not specified	Not specified	1 - 5					not established

(*) The ACGIH Time Weighted Average (TWA) has not been established nor has OSHA established the Permissible Exposure Limit (PEL) for this product, therefore the limits described have been established as guidelines by the manufacturer.

(a) The specific product is not identified due to "Trade Secret" status. In emergency situations further information may be obtained by the on - duty physician calling the emergency information number listed above. Reference 29 CFR 1910.1200 and / or 40 CFR 350.

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SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

SKIN: Wash contacted area with soap and water; DO NOT attempt to neutralize with chemical agents; if irritation persists, seek medical attention.

EYES: Check for and remove contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.

INGESTION: Drink large quantities of water or milk; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED) Non-flammable	FLAMMABLE LIMITS	LEL: Not applicable	UEL: Not applicable
	AUTOIGNITION TEMPERATURE:	Not determined	NFPA CLASS: None

GENERAL HAZARDS: Product is alkaline. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA
Carbon dioxide, water, water fog, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES
Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released. Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None

HAZARDOUS COMBUSTION PRODUCTS
Smoke, fumes or vapors, oxides of carbon.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes. Wash small spills to sanitary sewer. Large spills - confine spill, soak up with approved absorbent, shovel product into approved container for disposal.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

The use of local exhaust ventilation is recommended. Use corrosion-resistant ventilation equipment.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Neoprene, butyl or nitrile rubber gloves with cuffs.

EYE PROTECTION: Chemical splash goggles. Refer to 29 CFR 1910.133, ANSI Z87.1, or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls, apron, or other equipment should be worn to minimize skin contact, safety eyewash station nearby.

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Clear, alkali, water-based liquid, slight odor, reddish tint.	VAPOR DENSITY (AIR = 1) < 1
SPECIFIC GRAVITY (WATER = 1) 1.106	EVAPORATION RATE (Water = 1) < 1
SOLUBILITY IN WATER Appreciable (> 95%)	% VOLATILE (BY WEIGHT) > 90%
pH Approximately 11.0	VAPOR PRESSURE 17 mm Hg @ 20° C
BOILING POINT 212° F (100° C)	FREEZING POINT 32° F (0° C)
VISCOSITY Like that of water	VOLATILE ORGANIC COMPOUNDS (VOC's) None

SECTION 10 - STABILITY AND REACTIVITY
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STABILITY UNSTABLE: STABLE: X	CONDITIONS TO AVOID: Extreme temperatures, keep from freezing.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: X	CONDITIONS TO AVOID: None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD50 of Ingredient Species and Route	LC50 of Ingredient Species
Proprietary Ingredient A (*, a)	Not specified	Not specified	16,540 mg / kg Oral - rat	Not established
Proprietary Ingredient B (a)	Not specified	Not specified	7460 mg / kg Oral - rat	Not established
Proprietary Ingredient C (a)	Not specified	Not specified	Not established	Not established

SECTION 12 - ECOLOGICAL INFORMATION
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No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations for alkaline materials. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Non - Hazardous for Transport	
DOT HAZARD CLASS / Pack Group: Not regulated REFERENCE: Not Applicable UN / NA IDENTIFICATION NUMBER: None LABEL: None Required HAZARD SYMBOLS: None	IATA HAZARD CLASS / Pack Group: Not regulated IMDG HAZARD CLASS: Not regulated RID/ADR Dangerous Goods Code: Not regulated UN TDG Class / Pack Group: Not regulated Hazard Identification Number (HIN): None

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories
None

313 Reportable Ingredients:
None

CERCLA (Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: Not controlled

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 3.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: nwg

VbK Index: Not applicable

Risk Phrases

R36/38 Irritating to eyes and skin.

SYMBOL(S) REQUIRED FOR LABEL

Irritant



Safety Phrases

S2 Keep out of the reach of children.
S24/25 Avoid contact with skin and eyes.
S28 After contact with skin, wash immediately with pl

SECTION 16 - OTHER INFORMATION

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS HAZARD RATINGS

HEALTH	1	* = Chronic Health Hazard	2 = MODERATE
FLAMMABILITY	0	0 = INSIGNIFICANT	3 = HIGH
PHYSICAL HAZARD	0	1 = SLIGHT	4 = EXTREME

PERSONAL PROTECTIVE EQUIPMENT C Safety Glasses, Gloves, Apron

REVISION SUMMARY:

This MSDS has been revised in the following sections:
Format update

MSDS Prepared by:

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.