

PENTRA-GUARD™ (HP)

MATERIAL SAFETY DATA SHEET



1. PRODUCT COMPANY IDENTIFICATION

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|----------------------------|--|
| Product Name | Pentra-Guard™ (HP) |
| General Use | Concrete Protective Clear Coat |
| Product Description | White alkaline liquid, may cause eye and skin irritation upon contact. |

Details of the Supplier of the Safety Data Sheet / Manufacturer / Supplier

Advanced Concrete Technologies, LLC, 450 South 1325 West, Orem, UT 84058, USA
 Telephone Number: 801-375-2280

Distributor Detail

| | |
|---|--|
| Region | New Zealand / Australia |
| Lesas Systems 2017 LTD: 700 Great South Road, Penrose, P O Box 9826, Auckland, New Zealand, Phone: +64 9 526 7136, Fax: +64 9 525 2139, Freephone: 0800 74 5372, Email: sales@lesasystems.co.nz | |
| Emergency contact | 0800 764 766 - New Zealand National Poisons Centre |

2. HAZARDS INGREDIENTS

| HAZARDOUS COMPONENTS | % BY WEIGHT | CAS# | EINECS No | HAZARD SYMBOL | RISK PHRASES Full Text Section 16 |
|--------------------------------|-------------|---------------|----------------|---------------|-----------------------------------|
| Proprietary Ingredient A (*,a) | 7-13 | Not specified | Not specified | Xi | R-36//38 |
| Proprietary Ingredient B (a) | 5-10 | Not specified | Not specified. | Xi | R-38, 41, 43 |
| Proprietary Ingredient C (a) | 3-7 | Not specified | Not specified | C | R-34 |

(*) The ACGIH Threshold Limit Value (TLV) 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.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW - Alkaline liquid, prolonged contact may cause skin & eye irritation. Ingestion may cause gastric distress. Hazard symbols for this product - Xi. R-Phrases - R-36/38

Potential Health Effects

| | |
|------------------------|---|
| Inhalation | Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult, give oxygen. Seek medical attention if breathing is still difficult. |
| Skin | Prolonged contact may cause irritation. |
| Eyes | Contact with eyes will cause irritation |
| Ingestion | May cause gastric distress, vomiting, diarrhea |
| Carcinogenicity | NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No |

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4. FIRST-AID MEASURES

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| 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 neutralise 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. |

5. FIRE-FIGHTING MEASURES

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| 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. |

6. ACCIDENTAL RELEASE MEASURES

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| Steps to be in Case Material is Released or Spilled | Material is alkaline wear proper PPE. Stop the source of the release if you are not put at risk. Use absorbent material (such as sand or kitty litter) to absorb the spill, use plastic shovel to pick up absorbent for disposal. |
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7. HANDLING AND STORAGE

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| 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. |
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8. EXPOSURE CONTROL/PERSONAL PROTECTION

| Hazardous Components | NIOSH | | | | ACGIH | | | |
|--|------------------------------------|-----------|----------|------------|------------------------------------|-----------|----------|----------|
| | TWA ppm | TWA mg/m3 | STEL ppm | STEL mg/m3 | TWA ppm | TWA mg/m3 | STEL ppm | STEL ppm |
| Proprietary Ingredient A (*,a) Proprietary Ingredient B (a) Proprietary Ingredient C (a) | Not Established Not Established | | | | Not Established Not Established | | | |

Personal Protection

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|-------------------------------|---|
| 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 or European Standard EN166. |

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| Other Protective Clothing or Equipment | Overalls, apron, or other equipment should be worn to minimize skin contact, safety eyewash station nearby. |
| Work / Hygiene Practices | Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------------------|--|-----------------------------------|--------------------|
| Appearance and Odour | Milky white, distinct ammonia odour | Vapour Pressure | 17mm Hg 20°C |
| pH | Approximately 11.0 | Specific Gravity (water=1) | 1.106 |
| Boiling Point / Boiling Range | 100°C | Solubility in Water | Appreciable (>95%) |
| Flash Point | Non-flammable | Viscosity | Like that of water |
| Flammable Limits | LEL: Not applicable UEL: Not applicable | Vapour Density (air=1) | <1 |
| Autoignition Temperature | Not determined | Evaporation Rate (water=1) | < 1 |

10. STABILITY AND REACTIVITY

| | | | |
|---|---|----------------------------|--|
| Stability | Unstable: Stable: X | Conditions to Avoid | Extreme temperatures, keep from freezing |
| Incompatibility (Materials to Avoid) | Strong oxidisers, strong acids | | |
| Hazardous Decomposition or By Products | 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 Polymerisation | May Occur: Will Not Occur: X | Conditions to Avoid | None |

11. TOXICOLOGICAL INFORMATION

| HAZARDOUS COMPONENTS | CAS# EINECS# | LD50 OF INGREDIENT (Specify Species and Route) | LD50 OF INGREDIENT (Specify 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 |

12. ECOLOGICAL INFORMATION

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.

13. DISPOSAL CONSIDERATIONS

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| 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. |
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14. TRANSPORT INFORMATION

| | | | |
|---|-----------------------------|---|---------------|
| Proper Shipping Name | Non-Hazardous for Transport | | |
| Dot Hazard Class / Packaging Group | Not required | Dot Hazard Class / Packaging Group | Not regulated |
| Reference | Not Applicable | IMDG Hazard Class | Not regulated |
| UN / NA Identification Number | None | RID /ADR Dangerous Goods Code | Not regulated |
| Label | None Required | UN TDG Class / Packaging Group | Not regulated |
| Hazard Symbols | None | Hazard Identification Number (HIN) | None |

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

15. REGULATORY INFORMATION

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| TSCA (USA - 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 or Polymer Exemption has been granted in accordance with 40 CFR 723.50. |
| SARA TITLE III (USA - Superfund Amendments and Reauthorization Act) | 311/312 Hazard Categories: None 313 Reportable Ingredients: None |
| CERCLA (USA - Comprehensive Response Compensation and Liability Act) | None |
| California Prop 65 Safe Drinking Water and Toxic Enforcement Act of 1986 | There are no 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 2. |
| 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 2 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. |
| Risk Phrases | R36/38 Irritating to eyes and skin |
| Symbol(s) Required for Label | Irritant |
| Safety Phrases | S24/25 Avoid contact with skin and eyes S28 After contact with skin, wash immediately with plenty of soap and water. |

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16. OTHER INFORMATION

| | | | | |
|--------------------------------------|--|---|-------------------------------|------------|
| Notes & Full R-Phase Text | R34 Causes burns R36/38 Irritating to eyes and skin R41 Risk of serious damage to the eyes R43 May cause sensitization by skin contact | | | |
| 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: Text Updates | | | |
| MSDS Prepared by | Comprehensive Data Base, Inc. P.O. Box 395 Intercession City, FL 33848 USA (863) 644 - 3298 www.compdatabase.com or www.msds.cc | | | |

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.