Tile Prep MSDS DATE: 03/15

FILE NO.: DM801

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Tile prep SYNONYMS: N/A PRODUCT CODES: SKU 50801

MANUFACTURER: Shield Products, Inc.

DIVISION: N/A

ADDRESS: 6010 NW 99th Ave. Doral, Florida 33178

EMERGENCY PHONE: 904-880-6060 CHEMTREC PHONE: 800-424-9300

OTHER CALLS: N/A FAX PHONE: N/A

CHEMICAL NAME: Hydrofluoric acid

CHEMICAL FORMULA: N/A

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL INGREDIENT CAS WT.
NUMBER PERCENT

Hydrogen fluoride 7664-39-3 4

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: Eye contact (irritant, corrosive)

SKIN: Hazardous in case of skin contact (corrosive, irritant, permeator)

INGESTION: Liquid or spray mist may produce tissue damage particularly on mucous membranes.

INHALATION: Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15-30 minutes. Cold water may be used. Keep the eyelids apart and away from the eyeballs during irrigation. Do not use oily drops or ointment or HF skin burn treatments on the eyes. Get medical attention immediately, preferrably an eye specialist. If a physician is not immediately available, apply one or two drops of ophthalmic anesthetic (e.g. 0.5% Pontocaine Hydrochloride solution). Place ice pack on eyes until reaching emergency room.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. While waiting for medical attention, it has been shown that flushing the affected area with water for one minute and then massaging HF Antidote Gel into the wound until there is a cessation of pain is a most effective first aid treatment. HF Antidote Gel contains Calcium Gluconate which combines with HF for insoluble Calcium Fluoride, thus preventing the extraction of calcium from the body tissue and bones.

Another alternative first aid treatment, after thorough washing of the burned area, is to immerse the burned area in a solution of 0.2% iced aqueous Hyamine 1622 or 0.13% iced aqueous Zephiran Chloride. If immersion is inpractical, towels should be soaked with one of the above solutions and used as compresses for the burn area. Hyamine 1622 is a trade name for Tetracaine

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Benzethonium Chloride. Zephiran is a trade name for Benzalkonium Chloride. Again, seek medical attention as soon as possible for all burns regardless of how minor they may appear initially.

INGESTION: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the Product: Non-flammable

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill: Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as organic materials, metals, alkalis, moisture. May corrode metallic surfaces and glass. Store in a polyethylene container.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

PROTECTIVE CLOTHING OR EQUIPMENT: Splash goggles. Full suit (impervious). Vapor respirator. Impervious Boots. Gloves (impervious).. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

WORK HYGIENIC PRACTICES:

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EXPOSURE GUIDELINES: Hydrogen fluoride

STEL: 2.3 (mg/m3) from ACGIH (TLV) [United States] STEL: 3 (ppm) from ACGIH (TLV) [United States]

CEIL: 6 from NIOSH

CEIL: 5 (mg/m3) from NIOSH

TWA: 3 STEL: 6 (ppm) from OSHA (PEL) [United States]Consult local authorities for acceptable exposure limits.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid.

ODOR: Acrid (Strong.)

BOILING POINT: 108°C (226.4°F)

F: C:

MELTING POINT: <-36.111°C (-33°F)

F: C:

FREEZING POINT:

F: C:

VAPOR PRESSURE: 3.3 kPa(@20°C)

@

F:

VAPOR DENSITY (AIR = 1): 1.97

F:

C:

SPECIFIC GRAVITY (H2O = 1): 1.15-1.18

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: The product is stable.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute toxicity of the vapor (LC50): 342 1 hours [Mouse].

Chronic Effects on Humans: May cause damage to the following organs: lungs, mucous membranes, skin, eyes, bones, teeth.

Other Toxic Effects on Humans: Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (corrosive), of ingestion.

SECTION 11 NOTES:

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SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Ecotoxicity: Not available. BOD5 and COD: Not available.

Products of Biodegradation:Possibly Hazardous short term degradation products are not likely. However, long term degradation products may arise.

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Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Hydrofluoric Acid solution (Hydrogen fluoride)

HAZARD CLASS: 8 ID NUMBER: UN 1790 PACKING GROUP: II

LABEL STATEMENT: Corrosive

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

Federal and State Regulations:

Connecticut hazardous material survey.: Listed as Hydrofluoric acid or Hydrogen fluoride

Illinois toxic substances disclosure to employee act: Listed as Hydrofluoric acid or Hydrogen fluoride

Illinois chemical safety act: Listed as Hydrofluroic or Hydrogen fluoride

New York release reporting list: Listed as Hydrofluoric acid

Rhode Island RTK hazardous substances: Listed as Hydrofluoric acid or Hydrogen fluoride

Pennsylvania RTK: Listed as Hydrofluoric

Minnesota: Hydrogen fluoride

Massachusetts RTK: Listed as Hydrogen fluoride

Massachusetts spill list: Listed as Hydrofluoric acid or Hydrogen fluoride

New Jersey: Listed as Hydrofluoric acid or Hydrogen fluoride

New Jersey spill list: Listed as Hydrofluoric acid or Hydrogen fluoride

Louisiana RTK reporting list: Listed as Hydrogen fluoride Louisiana spill reporting: Listed as Hydrogen fluoride

Califoria Director's List of Hazardous substances: Listed as Hydrofluoric acid or Hydrogen Fluoride

TSCA 8(b) inventory: Water; Hydrofluoric acid

TSCA 4(a) proposed test rules: Listed as Hydrogen fluoride

SARA 302/304/311/312 extremely hazardous substances: Listed as Hydrofluoric acid or Hydrogen fluoride

SARA 313 toxic chemical notification and release reporting: Listed as Hydrogen fluoride

CERCLA: Hazardous substances.: Listed as Hydrofluoric acid or Hydrogen fluoride: 100 lbs. (45.36 kg)

SECTION 15 NOTES:

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SECTION 16: OTHER INFORMATION

OTHER INFORMATION: Health Hazard: 3

Fire Hazard: 0 Reactivity: 0

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