

Drain-Cleanse

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MSDS NO. Drain-Cleanse

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name

Drain-Cleanse

Manufacturer

Diversitech

6650 Sugarloaf Parkway, Duluth, GA, 30097

EMERGENCY Phone No.: 1 800.255.3924 Chem-Tel (Chemical Emergencies)

Phone (For Information): 1+678.542.3600

DATE REVISED: 4/18/2011

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2. HAZARDS IDENTIFICATION

Emergency Overview: Danger! Corrosive! Poison! Causes respiratory tract, eye and skin burns. Harmful if absorbed through skin or if swallowed.

Contains Material Which Causes Damage To The Following Organs: Lungs, respiratory tract, skin, eye, lens or cornea. Causes severe irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Routes of entry: Inhalation. Ingestion.

Potential acute health effects

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin.

Inhalation: Corrosive to the respiratory system.

Ingestion: Toxic if swallowed. May cause burns to mouth, throat and stomach.

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

Medical conditions: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce damage to target organs.

Signs and Symptoms of Exposure:

Inhalation: Effects from inhalation of mist and may cause serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may vary from mild to severe irritation, sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion: Symptoms may include burns of mouth, throat, and stomach bleeding, vomiting, diarrhea, fall in blood pressure.

Skin Contact: Contact with skin can cause redness, irritation or severe burns and scarring with greater exposures.

Eye Contact: Contact with mist, spray or liquid causes redness, severe irritation or burning in eyes. Prolonged exposures can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or mists has a destructive effect upon tissue.

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3. HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS No.	EINECS No.	% or Range	Symbol	Risk Phrases
Water	7732-18-5		60-80		
Potassium hydroxide	1310-58-3	215-181-3	10-20	C	R35
Sodium silicate	1344-09-8	215-685-3	10-20	Xi	R34, R37

Additional information: For the wording of the listed risk phrases refer to section 15.

4. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician: Perform endoscopy in all cases of suspected potassium hydroxide ingestion. In cases of severe esophageal corrosion, consider the use of therapeutic doses of steroids. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

5. FIREFIGHTING MEASURES

This product is not flammable. However, potassium hydroxide solutions can react with non-ferrous metals to generate flammable hydrogen gas.

Explosion: May liberate hazardous quantities of hydrogen gas when in contact with incompatible materials.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

6. SPILL/ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in [Section 8](#) Remove contaminated clothing immediately. Contain and recover liquid when possible. Do not flush alkaline residues to the sewer. Residues from spills can be diluted with water, and then neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance, then transfer the absorbed liquid to a suitable recovery container for disposal. Do not use aluminum tools to collect absorbed material or aluminum containers to store collected waste. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities (500 gallons) of this product. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

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7. HANDLING AND STORAGE

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatible materials. Protect from freezing. Containers of this material may be hazardous when empty since they retain product residues. Observe all warnings and precautions listed for the product. Do not store with aluminum or magnesium. Do not mix with acids or organic materials. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 15 mg/m³ Ceiling (calculated for mixture)

ACGIH Threshold Limit Value (TLV): 15 mg/m³ Ceiling (calculated for mixture)

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half-facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear rubber, neoprene, nitrile, Saranex® boots, gloves, lab coat, apron or coveralls, as necessary and appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eyewash fountain and quick-drench facilities or a source of running water in the work area.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the toilet.

9. PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:>220°F

Vapor pressure (mm Hg): Same as water

Vapor Density (Air = 1): Same as water

Solubility in water: Water miscible

Appearance and odor: Clear, odorless liquid

Specific gravity (H₂O = 1): 1.19

Melting Point (Pour Point): <25°F

Evaporation Rate (Water = 1): >1

pH@ 25°C: <14

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10. STABILITY and REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Potassium oxide. Decomposition by reaction with non-ferrous metals releases flammable and explosive hydrogen gas.

Hazardous Polymerization: Will not occur.

Incompatibilities: Potassium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may cause violent reactions. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. Contact with metals such as aluminum, magnesium, tin, and zinc cause formation of flammable hydrogen gas. Potassium hydroxide, even in fairly dilute solution, reacts readily with various sugars to produce carbon monoxide.

Conditions to Avoid: Extreme heat, incompatibles.

11. TOXICOLOGY INFORMATION

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

Toxicity to Animals: Acute oral toxicity (LD50): 1365 mg/kg (Rat) (Calculated value for the mixture).

Chronic Effects on Humans:

When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. The material is a strong irritant and is corrosive to the skin, eyes, upper respiratory tract and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes in contact.

Mutagenic Effects: Mutagenic for mammalian somatic cells. (Potassium hydroxide).

Carcinogenicity: This product is not classified as a carcinogen by NTP, IARC or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product is slightly toxic to aquatic life. Toxicity is primarily associated with pH.

Aquatic Toxicity: This material is alkaline and may raise the pH of surface waters with low buffering capacity. This material has exhibited moderate toxicity to aquatic organisms.

Freshwater Fish Toxicity:

LC50 (Mosquito fish): 80 mg/L/96 hr (static bioassay in fresh water at 18-19 C)

LC50 (Fathead Minnow): 179 mg/L/96 hr (static at 22.3-24.7 C)

Invertebrate Toxicity:

EC50 (*Daphnia magna*): 60 mg/L/48 hr (static bioassay at 20.3-20.7 C)

Algae Toxicity: ErC50 (*Selenastrum capricornutum*): 61 mg/L/96 hr (static bioassay at 23-23.9 C)

FATE AND TRANSPORT: BIODEGRADATION: This material will disassociate into ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize this material.

BIOCONCENTRATION: This material will not bioconcentrate.

ADDITIONAL ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

Environmental fate: Not available. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

13. DISPOSAL CONSIDERATIONS

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Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Treat empty containers as hazardous. Dispose of container and unused contents in accordance with federal, state and local requirements. State and local disposal regulations may differ from federal disposal regulations

RCRA Hazard Class (if discarded): CORROSIVE D002.

14. TRANSPORTATION INFORMATION

US DOT: Corrosive liquid, basic, inorganic, N.O.S. (contains potassium hydroxide), 8, UN3266, PGII

International (Water, I.M.O.)

Proper Shipping Name: Corrosive liquid, basic inorganic, N.O.S. (contains potassium hydroxide)

Hazard Class: 8

UN/NA: UN3266

Packing Group: II

15. REGULATORY INFORMATION



Corrosive Irritant

Risk phrases:

R34: Causes burns

R35: Causes severe burns.

R36/37/38: Irritating to eyes, respiratory system and skin



Safety
Glasses



Gloves



Vapor
Respirator

Safety phrases:

S2: Keep out of reach of children

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable, gloves and eye/face protection.

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US EPA

Comprehensive Environmental Response Compensation and Liability

Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances is not required for this material.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312) is not required for quantities below 250 pounds.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This material is not subject to reporting requirements.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA inventory.

State Right to Know

California Proposition 65: This product does not contain any materials on the Proposition 65 List of Chemicals Known to Cause Cancer or Reproductive Toxicity.

Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified.

Pennsylvania: Hazardous substances must be identified.

California SCAQMD Rule 443.1 (VOC's): None

Chemical Inventory Status

						Canada		
Ingredient	TSCA	EC	Japan	Australia	Korea	DSL	NDSL	Phil.
Potassium hydroxide (1310-73-2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Federal, State & International Regulations								Yes

Ingredient	SARA 302		SARA 313	TSCA	CERCLA	261.33	8(d)	
Potassium hydroxide (1310-73-2)	No	No	No	1000	No	No	No	
Chemical Weapons Convention:	No							

TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Mixture / Liquid)

Australian Hazchem Code: 2R

Poison Schedule: S6

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION:

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NFPA Ratings: Health: **3** Flammability: **0** Reactivity: **1**

Label Hazard Warning:

Danger: Corrosive. Poison. Contains potassium hydroxide and sodium silicate.

Causes eye and skin burns.

Harmful or fatal if swallowed.

Mists cause severe irritation to respiratory organs.

Label Precautions:

KEEP OUT OF REACH OF CHILDREN

Wear eye and skin protection when using this product.

Avoid breathing mists.

Label First Aid:

Eye contact: Immediately flush eyes with cool water for 15 minutes, lifting the eyelids to flush the area behind the lid. Get medical attention as soon as first aid is complete.

Skin: Rinse with water for 15 minutes, then wash the affected area with soap and water to remove and residual product. Get medical attention if irritation persists.

Ingestion: Drink 3-4 glasses of water and call the nearest poison control center.

Inhalation: Remove the victim to fresh air. If breathing has not returned to normal within 15 minutes, get medical attention.

Consult the Safety Data Sheet for additional storage, handling and regulatory information.

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement