HAVILAND PRODUCTS COMPANY SAFETY DATA SHEET



Section 1: Identification

Product Name: Havaklean KP Product Code:H000773

Haviland Products Company 421 Ann Street NW Grand Rapids, MI 49504 (616) 361-6691

Emergency Phone CHEMTREC (800) 424-9300 CHEMTREC International (703) 527-3887

Product Use: NA

Not recommended for: NA

Section 2: Hazard(s) Identification

GHS Ratings:

Corrosive to metals	1	Corrosive to metals
Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Dermal Toxicity	Acute Tox. 2	Dermal>50+<=200mg/kg
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin single exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases
Aquatic toxicity	A1	Acute toxicity <= 1.00 mg/l

GHS Hazards		GHS Precautions	<u> </u>
H290	May be corrosive to metals	P201	Obtain special instructions before use
H302	Harmful if swallowed	P202	Do not handle until all safety
H310 H314	Fatal in contact with skin Causes severe skin burns and		precautions have been read and understood
	eye damage	P234	Keep only in original container
H318	Causes serious eye damage	P260	Do not breathe
H361	Suspected of damaging fertility or		dust/fume/gas/mist/vapors/spray
H370	the unborn child Causes damage to organs	P262	Do not get in eyes, on skin, or on clothing
H373	May cause damage to organs through prolonged or repeated	P264	Wash face, hands, and any exposed skin thoroughly after handling
H400	exposure Very toxic to aquatic life	P270	Do not eat, drink or smoke when using this product
		P273	Avoid release to the environment

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clothing/eye protection/face protection Use personal protective equipment as required P310 Immediately call a POISON CENTER or doctor/physician P314 Get Medical advice/attention if you feel unwell P321 Specific treatment (see first aid treatment on SDS) P322 Specific measures (see first aid treatment on SDS) P330 Rinse mouth P361 Remove/Take off immediately all contaminated clothing P363 Wash contaminated clothing before reuse P390 Absorb spillage to prevent material damage P391 Collect spillage P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P302+P350 IF ON SKIN: Gently wash with soap and water P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P307+P311 IF exposed: Call a POISON CENTER or doctor/physician P308+P313 IF exposed or concerned: Get medical advice/attention P405 Store locked up P406 Store in a corrosive resistant container with a resistant inner liner P501 Dispose of contents/container in accordance with local/regional/national/international regulations	P280	Wear protective gloves/protective
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Danger



Section 3: Composition/Information on Ingredients

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Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Potassium hydroxide 1310-58-3 20 to 30%		2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
Trade Secret 5 to 10%			
Trade Secret 1 to 5%			
Phosphoric acid 7664-38-2 1 to 5%	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL
Trade Secret 1 to 5%			

Section 4: First-aid Measures

Inhalation

Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

Eye Contact

Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact

Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

Ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5: Fire-fighting Measures

Extinguishing Media

Use extinguishing media suitable for surrounding fires.

Specific Hazards Arising from the Chemical

This material is corrosive to all human tissue. If will react violently with many organic chemicals, especially nitrocarbons and chlorocarbons. Caustic potash reacts with zinc, aluminum, tin and other active metals liberating flammable hydrogen gas. Dilution with water evolves large amounts of heat.

Special Protective Equipment and Precautions for Firefighters

Special Information: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor supressing foam may be used to reduce vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Recover by pumping (use an explosion proof or hand pump).

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Section 7: Handling and Storage

HANDLING: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. Ground and bond containers when transferring material. Always open containers slowly to allow any excess pressure to vent. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

STORAGE: Keep away from heat, sparks, and flame. Store containers in a cool, well ventilated place. Keep container closed when not in use. Protect from direct sunlight.

Section 8: Exposure Control/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Potassium hydroxide 1310-58-3		2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
Trade Secret N/A			
Trade Secret N/A			
Phosphoric acid 7664-38-2	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL
Trade Secret N/A			

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

 $\textbf{SKIN PROTECTION:} \ \ \text{Wear impervious protective gloves.} \ \ \text{Wear protective gear as needed - apron, suit, boots.}$

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

Section 9: Physical and Chemical Properties

Odor: Detergent odor	
Odor threshold: Unknown	
pH : >13	
Melting point: Unknown	
Solubility: Unknown	
Flash point: Unknown	
Flammability: Unknown	
Specific Gravity 1.29	
Decomposition temperature: Unknown	
Grams VOC less water: Unknown	

Section 10: Stability and Reactivity

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Chemical Stability:

STABLE

Incompatibile Materials

 $\label{lem:condition} \mbox{Acids, organic chemicals, nitrocarbons, halocarbons, active metals and their}$

alloys, leather, wool.

Conditions to Avoid

Contact with acids and active metals

Hazardous Decomposition Products

Flammable hydrogen gas (decomposition caused by reaction with active

metals).

Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Oral Toxicity LD50: 1,278mg/kg

Component Toxicity

7664-38-2 Phosphoric acid

Oral LD50: 1,530 mg/kg (Rat) Dermal LD50: 2,740 mg/kg (Rabbit)

Routes of Entry:

Inhalation Ingestion Skin contact Eye contact

Eyes Skin Respiratory System

Effects of Overexposure

<u>CAS Number</u> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u>

Section 12: Ecological Information

Component Ecotoxicity

Trade Secret 96 Hr LC50 Oncorhynchus mykiss: >100 mg/L

48 Hr EC50 water flea: >100 mg/L

Section 13: Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Information

UN1760, Corrosive Liquid, N.O.S. (Containing Potassium Hydroxide), 8, PGII

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances

7664-38-2 Phosphoric acid

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1310-58-3 Potassium hydroxide

TSCA 8(b) Inventory

Trade Secret
7664-38-2 Phosphoric acid
Trade Secret
Trade Secret
1310-58-3 Potassium hydroxide

Country Regulation All Components Listed

Section 16: Other Information

Date Prepared: 11/15/2017

Disclaimer

The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

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