

Material Safety Data Sheet: ProTek® 100

July 23, 2008

KB International LLC 735 Broad St., Suite 209 Chattanooga, TN 37402

Phone: (423) 266-6964 Fax: (832) 201-9196 email: info@kbtech.com

1. MATERIAL IDENTIFICATION

Product Name: ProTeK® 100

Chemical Family: Blend of alkaline salts
CAS Reg. No.: Proprietary Mixture
Formula: Proprietary Mixture

Emergency Phone No.: North America: 1-800-255-3924; Worldwide: +01-813-248-0585

2. HAZARDOUS INGREDIENTS

Material or Component Wt % Hazard Data

Potassium Hydroxide CAS 1310-58-3 45 PEL & TLV 2 mg/m³

3. PHYSICAL DATA

Material is (at normal conditions): Liquid

Appearance and Odor: Yellow to amber odorless liquid.

pH: 12-

Boiling Point:Approximately 293°F, 145°CFreezing Point:Approximately 40°F, 4°CMelting Point:At 20°C (Dens.) 1.52 g/mlVapor Pressure:-1.5 mm g, 0.2 kPa @ 20°C

Vapor Density: NA

Solubility in Water: Water solution

4. REACTIVITY DATA

Revision Date: July 23, 2008

Stability (Conditions to Avoid): Product absorbs carbon dioxide from the air. Keep containers closed and sealed.

Incompatibility (Materials to avoid): Water and acid. Product is strong caustic alkali. May react violently with water, acid, and a number of organic compounds. Reacts rapidly with aluminum, tin and zinc. It

will also react with bronze and brass.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur.



5. FIRE AND EXPLOSION DATA

Flash Point: None

Flammable Limits in Air % by Volume: Upper NA Lower NA Extinguishing Media: Non-Combustible

Fire & Explosion Hazards: In water solution product can react with amphoteric metals (such as aluminum)

generating hydrogen which is flammable and/or explosive if ignited.

Fire-Fighting Equipment: Wear self contained (positive-pressure if available) breathing apparatus and full

protective clothing.

6. HEALTH HAZARD INFORMATION

Inhalation: Dusts or mists may cause severe irritation to upper respiratory tract.

Ingestion: May cause gastrointestinal irritation or ulceration and severe burns of

the mouth and throat. Single dose oral LD50 has not been determined.

This product is not listed as a carcinogen - IARC, NTP, OSHA

Skin: Short single exposure may cause severe skin burns. A single prolonged skin exposure is not

likely to result in absorption of harmful amounts. The dermal LD50 has not been determined.

Eyes: May cause severe irritation with corneal injury and result in permanent impairment of vision,

even blindness. Dusts may irritate eyes.

7. EMERGENCY AND FIRST AID PROCEDURES

Revision Date: July 23, 2008

Inhalation: Remove to fresh air if effects occur. Get immediate medical attention.

Skin: Immediate continued and thorough washing in flowing water for 30 minutes is imperative while

removing contaminated clothing. Get immediate medical assistance. Wash contaminated

clothing before reuse. Destroy contaminated shoes.

Eyes: Immediately flush with water, in less than 10 seconds from contact to avoid serious permanent

injury. Moving the victim from water access for transport to medical aid should be done only on the advice from qualified medical personnel. While transporting victim to a medical facility,

continue washing if possible.

Ingestion: Give large amounts of water or milk. Get immediate medical assistance.

Note to Physician: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or

esophagoscopic control. Material is strong alkali. If burn is present, treat as any thermal burn, after decontamination. For burns of skin only. Eye irrigation mat be necessary for an extended period of time to remove as much of material as possible. No specific antidote. Supportive care. Treatment based on the judgment of the physician in response to reactions of the patient.



8. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use only in open areas.

Ventilation: Do not inhale mists or spray.

Eye & Face Protection: Wear full goggles <u>and</u> face shield.

Hands, Arms, & Body: Rubber gloves and full work clothing. Add protective (rubber) clothing if splashing or

contact with solution is likely. Be certain eyewash and fresh water shower is available.

9. PRECAUTIONS & PROCEDURES

Exposure Guidelines: OSHA PEL and ACGIH TVL are 2 mg/m3 Ceiling.

Ventilation: Control airborne concentrations below the exposure guidelines. Good general ventilation

sufficient for most operations.

Normal Handling: Prevent eye and skin contact. Do not breathe dusts or mists.

Storage: Avoid storing next to strong acids. Material should be stored in clean, dry areas. Do not

store in underground tanks. Product absorbs CO2 from air. Keep containers closed and

sealed.

Skin Protection: Use protective clothing impervious to this material. Selection of specific items such as

gloves, boots, apron, hardhat and face shield or full-body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and

launder clothing before reuse.

Eye Protection: Use chemical goggles. Full-face shield in addition to goggles is recommended. Maintain

eye wash fountain and safety shower at or near work area.

Respiratory Protection: In misty conditions use an approved mist respirator. If respiratory irritation is experienced

use an approved air-purifying respirator.

Special Precautions/

Precautions for Diluting: Always add solution to water with constant agitation. Never add water to solution.

The water should be lukewarm (80-100°F. The addition of solution to liquid will cause rise in temperature. If solution becomes concentrated in one area, or is added too rapidly, or is added to hot or cold liquid, a rapid temperature increase can result in DANGEROUS mists or boiling or spattering which may cause an

immediate VIOLENT ERUPTION!

10. ENVIRONMENTAL

Waste Disposal Methods: Disposal must meet all federal, state, and local regulations.

Action to Take For Spills/Leaks: Only trained and properly protected personnel should be involved in spill cleanup

operations. Small accidental spills of material should be carefully flushed with water. Dilute acid, preferably acetic acid, may be used to neutralize only the final traces of

material after flushing.

TSCA Inventory Status: This product is listed on the TSCA inventory.



10. ENVIRONMENTAL - Continued

Revision Date: July 23, 2008

DOT Status: Regulated, hazardous class 8 packing group II, UN 1814 Potassium

Hydroxide.

SARA (III): 1000 lbs., RQ/CERCLA 302-313 Listed

RCRA: Hazardous waste if disposed of without neutralization.

HMIS & NFPA Ratings:	HMIS	NFPA
Health	3	3
Flammability	0	0
Reactivity	2	2
Special	NA	NA

NJTSRN KBT-0003 Water CAS 7732-18-5 Potassium Hydroxide CAS 1310-58-3

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer re-labels this product, legal counsel should be consulted to insure proper health, safety, and other necessary information is included on the container. Seller provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.