



SAFETY DATA SHEET

1. Product and company identification

Product Name POWER BOOST
UN/ID No. UN1814 Potassium Hydroxide Solution

Recommended use of the chemical and restrictions on use

Recommended Use For use in Stainless Machines

Supplier: Butler Chemicals, Inc.
3070 E. Ceena CT.
Anaheim, CA. 92806

Print date: December 27, 2018

Responsible name: K.B.
In case of emergency: HEALTH EMERGENCIES — SPILL EMERGENCIES
CALL INFOTRAC 1(800) 535-5053

Product type: Mixture

2. Hazards identification

Appearance: Colorless	Physical State: Liquid	Odor: No Odor
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Classification

Acute Toxicity – Oral	Category 4
Skin corrosion/irritation	Category 1 A
Serious eye damage/eye irritation	Category 1
Hazardous to the aquatic environment, acute hazard	Category 3
Hazardous to the aquatic environment long-term hazard	Category 3

Signal Word: Danger



Hazard Statement

Danger! Corrosive, Harmful if swallowed. Highly toxic by inhalation
Causes severe skin burns and eye damage. Causes serious eye damage.
May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Harmful to aquatic life with long lasting effects

Precautionary Statements – Preventions

Do not get in Eyes, on Skin or on Clothing. Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only with adequate ventilation, use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Avoid release to the environment
Keep container closed.
Keep out of reach of children

Precautionary Statements – Response

Immediately call A POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing immediately call a POISON CONTROL or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician, Rinse mouth, **Do not induce vomiting!**

Precautionary Statements – Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements –Disposal

Disposed of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Potassium Hydroxide (K(OH))	1310-58-3	<45

4. First aid measures

Eye contact:	Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Check for and remove any contact lenses if easy to do so. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids apart. Use cool running water. Call a physician or poison control center immediately.
Skin contact:	Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure. Destroy contaminated shoes. Chemical burns must be treated by a physician.
Inhalation:	Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and suitable mechanical device such as a bag and a mask. Call a physician if symptoms develop or persist.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Nausea, vomiting, Diarrhea. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure threat medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Flammability of the product:	
<u>Extinguishing media:</u>	
Suitable:	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2)
Non suitable:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the	During fire, gases hazardous to health may be formed

chemical

Firefighting equipment/instructions

Move containers from fire area if you can do so without risk

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged container or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the Safety Data Sheet

Environmental precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

Methods for cleaning up

Small spill:

Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Large spill:

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water. Never return spills to original container for re-use.

7. Handling and storage

Handling:

Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Storage

Store locked up. Store in original tightly closed container. Store away from incompatible materials.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering Controls

Apply technical measures to comply with the occupational exposure limits. Local exhaust ventilation recommended. Eye wash stations. Showers.

Individual-protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin and Body Protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear appropriate chemical resistant clothing.
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory equipment
General Hygiene considerations	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Physical state	Liquid
Flash Point	999.0 °F (537.2 °C)
Color	Colorless
pH	Approx. 12.1

Boiling/condensation point	Approx. 133 degrees C
Melting/freezing point	716 °F (380 °C) estimated / 48 °F (8.89 °C)
Vapor pressure	0.2 h Pa estimated
Solubility	Complete

10. Stability reactivity

Stability	Product is stable under normal recommended and normal conditions of use
Hazardous polymerization	Does of occur
Conditions to avoid	Contact with incompatible materials
Materials to avoid	Acids. Maleic anhydride
Reactivity	Product is stable and non-reactive under normal conditions of use, storage and transport
Hazardous decomposition products	No hazardous decomposition products are known

11. Toxicological information

Routes of exposure

Eyes	Causes serious eye damage
Skin	Causes severe skin burns
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Ingestion	Causes digestive tract burns. Harmful if swallowed
Symptoms related to the Physical, chemical and Toxicological characteristics	Burning pain and severe corrosive skin damage. Nausea, vomiting. Diarrhea. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing.

Information on toxicological effects

Acute toxicity Harmful if swallowed

Potassium Hydroxide (K(OH))

Acute

Oral

LD50 Rat 273 mg/kg

*Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye Causes serious eye damage

Irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer

Skin This product is not expected to cause skin sensitization

Germ cell mutagenicity Not data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Exotoxicity Harmful to aquatic life with long lasting effects

Components	Species	Test results
Potassium Hydroxide (K(OH))		
Aquatic		
Fish	LC50 Western mosquito fish (Gambusia affinis)	80 mg/1, 96 hours

* Estimates for product may be based on additional components data not shown.

13. Disposal considerations

Waste disposal:

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a license waste contactor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory Information	UN number	Proper shipping name	Classes	PG*
DOT Classification	UN1814	Potassium Hydroxide Solution	8	II

*PG: Packing group

15. Regulatory information

STATE REGULATIONS

US – California Proposition 65 – This product is not listed.

16. Other information

<u>HMS</u>	Health Hazards	Flammability	Reactivity	Personal Protection
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Disclaimer

The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet