Revision No. 1

Safety Data Sheet

Power Kleen



Section 1: Identification

GHS product identifier

Product Code: 72 Product name: Power Kleen

Recommended uses and uses advised against

Recommended use:

Machine dishwasher detergent. Uses not recommended: For commercial dish machines only.

Supplier details

Cleaner Solutions, LLC 1792 Latham St. Memphis, TN 38106

(901) 414-2288 Telephone (general) CleanerSolutions.net

Emergency telephone number

(800) 535-5053

Section 2: Hazard identification

United States (US)
According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

Skin Corrosion/Irritation 1

Label Elements OSHA HCS 2012

Danger



Hazard Statements H314 Causes severe skin burns and eye damage.

Precautionary Statements

Prevention

P260 Do not breathe dusts or mists.
P264 Wash hands and skin thoroughly after handling.

P280 Wear protective gloves, protective apron, eye protection and face shield where appropriate.

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Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth.

Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

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Rinse skin with water.

P363 Wash contaminated clothing before reuse.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a poison control center and seek medical attention.

P321 Specific treatment see section 4.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

Storage/Disposal

P501 Dispose of contents/container per guidelines in section 13.

P405 Store locked up.

Other hazards

No data available.

Other information **NFPA**



Section 3: Composition/Information on Ingredients

Substances

Material does not meet the criteria of a substance.

Mixtures

[Caustic Soda] CAS No. 1310-73-2 [Caustic Potash] CAS No. 1310-58-3 Sodium Hydroxide 12% - 44% Potassium Hydroxide

Proprietary Dispersants/Stabilizers [Proprietary Dispersants] CAS No. Not Applicable 0% - 12%

See section 11 for toxicological information.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation:

Move to fresh air. Call physician if symptoms develop or persist.

Skin:

Take off immediately all contaminiated clothing. Rinse skin with water or use emergency shower. Call physician or poison control center

immediately. Wash contaminated clothing or articles before reuse.

Eve:

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Call physician or poison control center immediatley.

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. Do not use mouth to mouth method if victim ingested substance. Artificial respiration may be administed only with pocket mask with one-way valve.

Most important symptoms and effects, both acute and delayed

Burning pain and severe corrosive skin damage. Diarrhea. Nausea, vomiting. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, blurred vision and foreign body sensation. Permanent eye damage/blindness could occur. Coughing.

Indication of any 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.

Section 5: Fire-Fighting Measures

Extinguishing media

04.07.2016 V3.0 Format: GHS: WHMIS, OSHA HCS 2012 Suitable extinguishing media:

Water fog. Foam. Dry chemical powder. CO2.

Unsuitable extinguishing media:

Do not use water jet as an extinguishier, as this will spread the fire.

Special hazards arising from the substance or mixture

Unusual fire and explosion hazards:

During fire, gasses hazardous to health may be formed.

Hazardous combustion products:

Material data lacking.

Advice for firefighters

Use water spray to cool containers exposed to fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled

material.

Emergency procedures:

Environmental precautions

As an immediate precautionary measure, isolate spill or leak for at least 50 meters. Keep unnecessary personnel away, and keep people upwind andn away from spill or leak. Do not breathe mist or vapor. Do not touch damages containers or spilled material unless

protected. Ensure adequate ventilation. Advise local authorities if spillage cannot be contained.

Avoid run off to waterways and sewers. Avoid release to the environment.

Methods and material for containment and clean-up

Stop leak if you can do it without risk.

Section 7: Handling and Storage

Precautions for safe handling

Incompatible materials or ignition sources:

Handling

Do not breathe mst or vapor. Do not get in eyes, on skin or on clothing. When using, do not eat, drink or smoke. Provide Adequate

Ventilation. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage

Store at or near room temperature. Keep container closed when not in use. Store locked up. Store away from incompatible materials.

Water, moisture and acids. Oxidizing agents. Metals. Halogenated metals. Magnesium. Chlorinated hydrocarbons. Alcohols. Maleic

anhydride. Phenols. Acid chlorides. Sugars. Organic compounds. Nitro compounds.

Section 8: Exposure Controls/Personal Protection

Control parameters

| Component | Result | NIOSH | ACGIH | Canada Ontario |
|--|--------|--------------|--------------|----------------|
| Sodium Hydroxide CAS No. 1310-73-2 | STELs | Data lacking | Data lacking | Data lacking |
| | TWAs | Data lacking | 2 mg/m³ | Data lacking |
| Potassium Hydroxide CAS No. 1310-58-3 | STELs | Data lacking | 2 mg/m3 | Data lacking |
| | TWAs | Data lacking | 2 mg/m3 | Data lacking |

Exposure controls

Engineering measures and controls:

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limit values. Good general ventilation (10 air changes per hour) should be used. Eye wash facilities and emergency shower must be available when handling this product. Perform a risk assessment to determine the appropriate PPE.

Incompatible materials or ignition sources:

Pictograms:









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Respiratory:

Eye and face:

Lye and lace

Must wear googles when using this product.

Hands:

Must wear chemical protective gloves when using this product.

Skin and body:

Must wear chemical protective clothing when using this product.

General industrial hygiene considerations:

Environmental exposure controls:

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling.

Follow best practice for site management and disposal of waste. Avoid release to the environment.

Key to Abbreviations

ACGIH= American Conference of Governmental Industrial Hygiene TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures NIOSH= National Institute of Occupational Safety and Health Exposure Limits are based on 15-minute exposures OSHA =Occupational Safety and Health Administration STEV = Short Term Exposure Value

MSHA = Mine Safety and Health Administration

STEL = Short Term

Section 9: Physical and Chemical Properties

Information on physical and chemical properties

| Material Description | | | | | | | |
|---|--------------------|--|---------------------------------------|--------|--|--|--|
| Physical Form | Liquid | | Appearance/Description | Clear. | | | |
| Color | Red-Orange | | Odor | Clear. | | | |
| Taste | Red-Orange | | Particulate Type | | | | |
| Particulate Size | | | Aerosol Type | | | | |
| Odor Threshold | | | Physical and Chemical | | | | |
| Odor Tilleshold | | | Properties | | | | |
| General Properties | General Properties | | | | | | |
| Boiling Point | | | Melting Point | | | | |
| Decomposition Temperature | | | Heat of Decomposition | | | | |
| рН | | | Specific Gravity/Relative Density | | | | |
| Density | | | Bulk Density | | | | |
| Water Solubility | | | Solvent Solubility | | | | |
| Viscosity | | | Explosive Properties | | | | |
| Oxidizing Properties: | | | | | | | |
| Volatility | | | | | | | |
| Vapor Pressure | | | Vapor Density | | | | |
| Evaporation Rate | | | VOC (Wt.) | | | | |
| VOC (Vol.) | | | Volatiles (Wt.) | | | | |
| Volatiles (Vol.) | | | | | | | |
| Flammability | | | | | | | |
| Flash Point | | | UEL | | | | |
| LEL | | | Autoignition | | | | |
| Self-Accelerating Decomposition Temperature (SADT) | | | Heat of Combustion (ΔHc) | | | | |
| Burning Time | | | Flame Duration | | | | |
| Flame Height | | | Flame Extension | | | | |
| Ignition Distance | | | Flammability (solid, gas) | | | | |
| Environmental | | | | | | | |
| Half-Life | | | Octanol/Water Partition coefficient | | | | |
| Coefficient of water/oil distribution | | | Bioaccumulation Factor | | | | |
| Bioconcentration Factor | | | Biochemical Oxygen Demand BOD/BOD5 | | | | |
| Chemical Oxygen Demand | | | Persistence | | | | |
| Degradation | | | | | | | |

Section 10: Stability and Reactivity

Reactivity

Chemical stability

Reacts violently with strong acids. May react with oxidizing agents.

Material is stable under normal conditions.

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Possible hazardous reactions

No dangerous reaction known under conditons of normal use. Hazardous polymerization does not occur.

Conditions to avoid

Do not mix with other chemicals. Contact with incompatible materials must be avoided.

Incompatible materials

Water, moisture and acids. Oxidizing agents. Metals. Halogenated metals. Magnesium. Chlorinated hydrocarbons. Alcohols. Maleic anhydride. Phenols. Acid chlorides. Sugars. Organic compounds. Nitro compounds.

Hazardous decomposition products

Carbon oxides. Heat is generated from contact with acids, water and/or alcohols. When wet, attacks metals producing extremely flammable hydrogen gas and can form explosive mixtures with air.

Section 11: Toxicological Information

Information on toxicological effects

| Component | CAS No. | Data |
|---------------------|-----------|--|
| Sodium Hydroxide | 1310-73-2 | LD50 dermal rabbit 1350 mg/kg (Rabbit; Literature,Rabbit; Literature) Data lacking Data lacking |
| Potassium Hydroxide | 1310-58-3 | Oral-rat LD50: 606.6667 mg/kg Data lacking Not expected to cause reproductive effects. |

Target organs

Routes of entry and/or exposure

Inhalation, Skin contact, eye contact, ingestion.

Potential health effects

Inhalation

Acute (immediate):

May cause irritation to the respiratory system.

Chronic (delayed):

Prolonged inhalation may be harmful.

Skin

Ingestion

Causes severe skin burns and eye damage.

Acute (immediate): Chronic (delayed):

This product is not expected to cause skin sensitization.

Acute (immediate):

Toxic if swalowed, Causes digestive tract burns.

Chronic (delayed):

No data available.

No data available

Eye

Acute (immediate): Causes serious eye damage.

Chronic (delayed):

Blindess and blurred viosn, foreign body sensation.

Section 12: Ecological Information

Toxicity

Harmful to aquatic life with long lasting effects.

Persistence and degradability

Material data lacking.

Bioaccumulative potential

Material data lacking.

Mobility in soil

Material data lacking

Other adverse effects

No studies have been found

Other information

No other adverse environmental efects

Section 13: Disposal Considerations

Waste treatment methods

Product waste

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Cleaner Solutions, LLC 1792 Latham St. Memphis, TN 38106 (901)414-2288

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Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Dispose of packaging and containers in accordance with federal, state and local regulations. Care should be taken with containers as residual liquid may remain within.

Section 14: Transport Information

UN Proper Shipping Name and D.O.T. Information

Transport containers shall be physically secured to the transporting vehicle to prevent accidental loss, tampering, or unauthorized removal.

Section 15: Regulatory Information

Safety, health and environmental regulations specific to substance or mixture

SARA hazard classifications:

Classified as hazardous - Sodium Hydroxide

Section 16: Other Information

Last revision date:

3/7/2016

Preparation date:

8/11/2021

Disclaimer and statement of liability:

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

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