

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Printing date 07.03.2014

Revision: 07.03.2014

1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Power Kleen
- **Article number:** 101665
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Basic cleaner
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Theochem Laboratories
7373 Rowlett Park Drive
Tampa, FL 33610
Phone: 813-237-6463
- **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585



2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

-
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Heightened danger of slipping when the product is spilled on the floor.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

-
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

Disodium Metasilicate Pentahydrate

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P280 Wear protective gloves / eye protection.

P260 Do not breathe mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

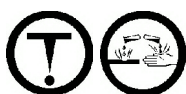
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Hazard description:

· WHMIS-symbols:

D2B - Toxic material causing other toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

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· vPvB: Not applicable.














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3 Composition/information on ingredients

3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 10213-79-3 EINECS: 229-912-9	Disodium Metasilicate Pentahydrate  C R34;  Xi R37  Skin Corr. 1B, H314  STOT SE 3, H335	< 10%
CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0	2-butoxyethanol  Xn R20/21/22;  Xi R36/38  Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332;  Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 10%
CAS: 68439-46-3 NLP: 500-446-0	alcohols, C9-11, ethoxylated  Xi R38-41  Eye Dam. 1, H318  Skin Irrit. 2, H315	< 10%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide  C R35  Skin Corr. 1A, H314	< 5,0%

· Additional information:

For the wording of the listed risk phrases refer to section 16.
Version 2

4 First aid measures

4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.

· After skin contact:

Immediately rinse with water.
If skin irritation continues, consult a doctor.
Seek immediate medical help for blistering or open wounds.

· After eye contact:

Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.

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- **4.2 Most important symptoms and effects, both acute and delayed**
Strong caustic effect on skin and mucous membranes.
Gastric or intestinal disorders.
- **Hazards**
Danger of gastric perforation.
Danger of severe eye injury.
Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed**
Do not administer preparations of the adrenalin-ephedrine-group.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** No further relevant information available.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
Dispose contaminated material as waste according to item 13.
Clean the affected area carefully; suitable cleaners are:
Warm water
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and storage

- **7.1 Precautions for safe handling**
Prevent formation of aerosols.
Avoid splashes or spray in enclosed areas.
Use only in well ventilated areas.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Unsuitable material for receptacle: aluminium.
Unsuitable material for receptacle: steel.
Unsuitable material for receptacle: glass or ceramic.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

111-76-2 2-butoxyethanol

IOELV (EU)	Short-term value: 246 mg/m ³ , 50 ppm Long-term value: 98 mg/m ³ , 20 ppm Skin
PEL (USA)	Long-term value: 240 mg/m ³ , 50 ppm Skin
REL (USA)	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV (USA)	Long-term value: 97 mg/m ³ , 20 ppm BEI
EL (Canada)	Long-term value: 20 ppm
EV (Canada)	Long-term value: 20 ppm Skin

1310-73-2 sodium hydroxide

PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Ceiling limit: 2 mg/m ³

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TLV (USA)	Ceiling limit: 2 mg/m ³
EL (Canada)	Short-term value: C 2 mg/m ³

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.

· **Ingredients with biological limit values:**

111-76-2 2-butoxyethanol

BEI (USA)	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
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- **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Ensure that washing facilities are available at the work place.

· **Respiratory protection:**

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

For spills, respiratory protection may be advisable.

· **Protection of hands:**



Protective gloves

Alkaline resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:**
Contact lenses should not be worn.



Safety glasses

- **Body protection:** Alkaline resistant protective clothing
- **Limitation and supervision of exposure into the environment**
No further relevant information available.
- **Risk management measures**
See Section 7 for additional information.
No further relevant information available.

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Colour:	Red
Odour:	Pleasant
Odour threshold:	Not determined.
- pH-value at 20 °C: 13
- **Change in condition**

Melting point/Melting range:	Not Determined.
Boiling point/Boiling range:	212 °F / 100 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Auto/Self-ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.
- **Vapour pressure at 20 °C:** 23 hPa
- **Density at 20 °C:** 1,03 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.

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- **Solubility in / Miscibility with water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **9.2 Other information** No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Corrosive action on metals.
Exothermic reaction with acids.
Reacts with strong oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** Prevent from drying out.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values relevant for classification:
--

1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive

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Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:**
The product causes an alteration of the pH-value within the testing system. The result refers to the non-neutralised sample.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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14 Transport information

- 14.1 UN-Number
- DOT, ADR, IMDG, IATA
- 14.2 UN proper shipping name

UN3267



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

- DOT
- ADR
- IMDG, IATA
- 14.3 Transport hazard class(es)
- DOT

Corrosive liquid, basic, organic, n.o.s. (Sodium hydroxide)

3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (SODIUM HYDROXIDE)

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (SODIUM HYDROXIDE)



- Class
- Label

8 Corrosive substances.

8

- ADR



- Class
- Label

8 (C7) Corrosive substances.

8

- IMDG, IATA



- Class
- Label

8 Corrosive substances.

8

- 14.4 Packing group
- DOT, ADR, IMDG, IATA

III

- 14.5 Environmental hazards:

- Marine pollutant:

No

- 14.6 Special precautions for user

Warning: Corrosive substances.

- Danger code (Kemler):

80

- EMS Number:

F-A,S-B

- Segregation groups

Alkalis

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- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

-
- **ADR**
 - **Limited quantities (LQ)** 5L
 - **Transport category** 3
 - **Tunnel restriction code** E
 - **UN "Model Regulation":** UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (SODIUM HYDROXIDE), 8, III

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

111-76-2 | 2-butoxyethanol

NL

- **IARC (International Agency for Research on Cancer)**

111-76-2 | 2-butoxyethanol

3

- **TLV (Threshold Limit Value established by ACGIH)**

111-76-2 | 2-butoxyethanol

A3

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

111-76-2 2-butoxyethanol

1310-73-2 sodium hydroxide

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R34 Causes burns.
 R35 Causes severe burns.
 R36/38 Irritating to eyes and skin.
 R37 Irritating to respiratory system.
 R38 Irritating to skin.
 R41 Risk of serious damage to eyes.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 WHMIS: Workplace Hazardous Materials Information System (Canada)
 DNEL: Derived No-Effect Level (REACH)

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PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Sources

SDS Prepared by:

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