



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
GB/T 16483-2008, GB/T 17519-2013

**Product Name** Power Kleen, Air Filter Cleaner

**Issuing Date** 18-Nov-2021  
**(M)SDS Number** UL-KN-011A

**Revision Date** 18-Nov-2021  
**Revision Number** 1

## 1. Identification

### Product identifier

**Product Name** Power Kleen, Air Filter Cleaner

### Other means of identification

**Product Code(s)** 99-0635

**UN/ID no** UN1760

**Pure substance/mixture** Mixture

### Details of the supplier of the safety data sheet

#### Supplier

K&N Engineering, Inc.  
Unit 609, 4th Bldg., 1970 Technology Town  
Mingzhi, Longhua District, Shenzhen, 518131  
0086-755-2376-0296

**E-mail address** compliance@knfilters.com

### Emergency telephone number

**Emergency telephone number** CHEMTREC (China): 4001-204937

### Recommended use of the chemical and restrictions on use

**Recommended use** Cleaning agent for car air filter

**Restrictions on use** No information available

## 2. Hazard(s) identification

### **Emergency Overview**

CORROSIVE - CAUSES IRREVERSIBLE EYE (AND SKIN) DAMAGE  
Risk of serious damage to eyes

**Appearance** Clear liquid

**Physical state** Liquid

**Odor** None

### Classification of the substance or mixture

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

### Label elements

**Signal word**

Danger

**Hazard statements**

Causes severe skin burns and eye damage

**Precautionary statements****Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Response**

Immediately call a POISON CENTER or doctor

Specific treatment (see .? on this label)

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

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

Wash contaminated clothing before reuse

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

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Physical and chemical hazards**

Not applicable.

**Health hazards**

Immediate Health Effects: Contact may cause burns to skin and eyes. Risk of serious damage to eyes. Impairment of vision.

Chronic effects: Not applicable.

**Environmental hazards**

Not applicable.

**Other hazards which do not result in classification**

Not applicable.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%
Sodium metasilicate	6834-92-0	5 - 10
Sodium hydroxide	1310-73-2	1 - 3

## 4. First-aid measures

### Description of necessary first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
<b>Most important symptoms/effects, acute and delayed</b>	Burning sensation.
<b>For emergency responders</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).
<b>Note to physicians</b>	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Unsuitable extinguishing media</b>	Water.
<b>Specific hazards arising from the chemical</b>	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
<b>Special protective actions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.
<b>Methods and material for containment and cleaning up</b>	Prevent further leakage or spillage if safe to do so. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.
<b>Precautions to prevent secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

<b><u>Precautions for safe handling</u></b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
<b><u>Conditions for safe storage, including any incompatibilities</u></b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.
<b>Incompatible materials</b>	Acids. Bases. Oxidizing agent.

## 8. Exposure controls/personal protection

### Occupational exposure limits

Chemical name	China	ACGIH TLV
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup> Ceiling	Ceiling: 2 mg/m <sup>3</sup>

### Monitoring and observation processes

No applicable information was found.

<b>Engineering controls</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Tight sealing safety goggles. Face protection shield.
<b>Skin and body protection</b>	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
<b>Hand protection</b>	Wear suitable gloves. Impervious gloves.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

Appearance	Clear liquid
Physical state	Liquid
Color	Red
Odor	None
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	> 12	
Melting point / freezing point		No data available
Initial boiling point and boiling range	> 100 °C	
Flash point		No data available
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density	1 - 1.1	
Water solubility	Soluble in water	
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available

**Additional information**

Explosive properties	No information available.
Oxidizing properties	No information available.

**10. Stability and reactivity**

<u>Stability</u>	Stable under normal conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
<u>Conditions to avoid</u>	Exposure to air or moisture over prolonged periods.
<u>Incompatible materials</u>	Acids. Bases. Oxidizing agent.
<u>Hazardous decomposition products</u>	None known based on information supplied.

**11. Toxicological information****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity****Numerical measures of toxicity****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium metasilicate	= 1153 mg/kg ( Rat )	-	-
Sodium hydroxide	= 325 mg/kg ( Rat )	= 1350 mg/kg ( Rabbit )	-

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes burns.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>Specific target organ toxicity (single exposure)</b>	No information available.
<b>Specific target organ toxicity (repeated exposure)</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. Ecological information**

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium metasilicate	-	LC50: =210mg/L (96h, Brachydanio rerio)	-
Sodium hydroxide	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

**Mobility in soil** No information available.

### 13. Disposal considerations

**Waste chemicals** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. Transport information

#### China

UN number or ID number UN1760  
 UN proper shipping name CORROSIVE LIQUID, N.O.S.  
 Transport hazard class(es) 8  
 Packing group II  
 China Technical Name Sodium metasilicate, Sodium hydroxide  
 Description UN1760, CORROSIVE LIQUID, N.O.S. (Sodium metasilicate, Sodium hydroxide), 8, II  
 Special Provisions 274

#### IMDG

UN number or ID number UN1760  
 UN proper shipping name CORROSIVE LIQUID, N.O.S.  
 IMDG Technical Name Sodium metasilicate, Sodium hydroxide  
 Description UN1760, CORROSIVE LIQUID, N.O.S. (Sodium metasilicate, Sodium hydroxide), 8, II  
 Transport hazard class(es) 8  
 Packing group II  
 Marine pollutant NP  
 Special Provisions 274  
 EmS-No F-A, S-B

#### IATA

UN number or ID number UN1760  
 UN proper shipping name Corrosive liquid, n.o.s.  
 IATA Technical Name Sodium metasilicate, Sodium hydroxide  
 Description UN1760, Corrosive liquid, n.o.s. (Sodium metasilicate, Sodium hydroxide), 8, II  
 Transport hazard class(es) 8  
 Packing group II  
 Special Provisions A3, A803  
 ERG Code 8L

#### Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

### 15. Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Catalog of occupational hazard factors:

Listed. Chemical hazards.

Catalog of occupational diseases:

Listed. Occupational poisoning.

Chemical name	Category
Sodium hydroxide	Chemical hazards

**Regulations on the Control over Safety of Hazardous Chemicals****Inventory of hazardous chemicals**

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed.

Weight-% 13

Chemical name	Serial number	Inventory of hazardous chemicals
Sodium metasilicate	1618	Listed
Sodium hydroxide	1669	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals

Not applicable

**List of hazardous chemicals under priority management**

Not applicable

**Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used**

Inventory of highly toxic goods

Not applicable

**Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

List of toxic chemicals severely restricted for import and export in China

Not applicable

**Measures for the Environmental Management of New Chemical Substances****IECSC - China Inventory of Existing Chemical Substances**

Contact supplier for inventory compliance status.

**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. Other information****Issuing Date** 18-Nov-2021**Revision Date** 18-Nov-2021**Revision Note** Initial Release.**Abbreviations and acronyms****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))



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U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**The information provided in this 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 a 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**