

Material Name: Sulfidic Caustic Solution SDS ID: 82988

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Sulfidic Caustic Solution

Product Code

None available.

Synonyms

Sodium Sulfide, Sulfide Sulfide, Sulfide Caustic

Product Use

Caustic solution. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

None known.

MANUFACTURER

Safety-Kleen Systems, Inc. 2600 North Central Expressway Suite 200 Richardson, Texas 75080

Richardson, Texas 75080 Phone: 1-800-669-5740 safety-kleen.com

Emergency Telephone Number

1-800-468-1760

Issue Date

July 7, 2021

Supersedes Issue Date

August 17, 2018

Original Issue Date

March 4, 2005

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Acute Toxicity - Oral - Category 4

Acute Toxicity - Dermal - Category 4

Skin Corrosion/Irritation - Category 1

Serious Eye Damage/Eye Irritation - Category 1

Respiratory Sensitization - Category 1

Specific target organ toxicity - Single exposure - Category 1

Specific target organ toxicity - Single exposure - Category 3

Specific target organ toxicity - Repeated exposure - Category 2

GHS Label Elements

Symbol(s)



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Signal Word

Danger

Hazard Statement(s)

Harmful if swallowed.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Causes damage to organs. (Respiratory system, cardiovascular system, central nervous system)

May cause respiratory irritation.

May cause damage to organs. (Respiratory system, lungs)

Precautionary Statement(s)

Prevention

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. In case of inadequate ventilation wear respiratory protection. Use only outdoors or in a well-ventilated area.

Response

If exposed: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment may be needed, see first aid section of Safety Data Sheet. If experiencing respiratory symptoms. 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. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. IF SWALLOWED. Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

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

Store locked up.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Other Hazards

Product may evolve highly toxic hydrogen sulfide gas.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	65-95
497-19-8	Sodium carbonate	<15
1310-73-2	Sodium hydroxide	<15
1313-82-2	Sodium sulfide	<15
16721-80-5	Sodium hydrosulfide	<5
7664-41-7	Ammonia	<2
7783-06-4	Hydrogen sulfide	<0.1

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Section 4 - FIRST AID MEASURES

Inhalation

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 experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eyes

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/physician.

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Most Important Symptoms/Effects

Acute

Eye damage, skin damage, respiratory system damage, cardiovascular system damage, central nervous system damage, respiratory tract irritation

Delayed

Respiratory sensitizer, respiratory system damage, lung damage

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Solution is non-flammable. However, if exposed to heat or acids, toxic Hydrogen Sulfide gas may be released and form explosive mixtures with air.

Hazardous Combustion Products

Hydrogen Sulfide Gas.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

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Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if this can be done without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal. Prevent run-off into sewers, drains or surface waterways. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Do not breathe vapor or mist. Avoid contact with eyes Skin clothing shoes. Vapors from hot material may be toxic. Use in a well ventilated area. Wash hands after handling and before eating. Corrosive to steel above 150°F (65.5°C). Material should not be used in handling systems or storage containers for the product.

Conditions for Safe Storage, Including any Incompatibilities

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

Do not handle or store near an open flame, heat or other sources of ignition. Store tote and smaller containers out of direct sunlight at moderate temperatures (>80°F, 27°C). Do not store combustibles in the area of storage vessels.

Incompatible Materials

Strong acids

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Sodium hydroxide	1310-73-2
ACGIH:	2 mg/m3 Ceiling
NIOSH:	2 mg/m3 Ceiling; SK: DIR(COR) (Apr 2011); 10 mg/m3 IDLH
OSHA (US):	2 mg/m3 TWA
Ammonia	7664-41-7
ACGIH:	25 ppm TWA; 35 ppm STEL
NIOSH:	25 ppm TWA ; 18 mg/m3 TWA; 35 ppm STEL ; 27 mg/m3 STEL 300 ppm IDLH
OSHA (US):	50 ppm TWA ; 35 mg/m3 TWA
Hydrogen sulfide	7783-06-4
ACGIH:	1 ppm TWA; 5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m3 Ceiling 10 min; 100 ppm IDLH

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OSHA (US):	20 ppm Ceiling
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ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Glove Recommendations

Where skin contact is likely, wear gloves impervious to product; use of natural rubber (latex) or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant face shield, boots, apron, whole body suits or other protective clothing.

Protective Materials

A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, Gloves, and Lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid.	Physical State	Liquid
Odor	Strong hydrogen sulfide (Rotten egg)	Color	Yellow, dark green.
Odor Threshold	Not available	рН	10.4 - 12.5
Melting Point	1.1 °C (0 °F)0-15%	Boiling Point	>100 °C (212 °F)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	17 - 18 mmHg @ 20) °C (Approximate)
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	1.08 - 1.2 (9.0 to 10.0 lb/gal)
Water Solubility	(Complete)	Partition coefficient: n-octanol/water	Not available

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Viscosity Not available Kinematic viscosity Not available
Solubility (Other) Not available Density Not available
Physical Form Liquid. Molecular Weight Not available

Other Information

No additional information is available.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Heating product will release toxic and flammable Hydrogen Sulfide gas. Fire may also release sulfur dioxide.

Conditions to Avoid

Avoid excessive heat and ignition sources.

Incompatible Materials

Acids will cause the release of highly toxic hydrogen sulfide. Sulfide caustic solutions are not compatible with copper, zinc, aluminum or their alloys.

Hazardous decomposition products

Hydrogen sulfide, sulfur dioxide.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory tract irritation. May cause damage to respiratory system and lungs. Product solution vapors contain highly toxic hydrogen sulfide gas.

Skin Contact

Harmful if swallowed. Causes severe skin burns.

Eye Contact

Causes serious eye damage.

Ingestion

Harmful if swallowed. Ingested material may evolve highly toxic Hydrogen Sulfide gas. May cause corrosive damage to the gastrointestinal tract on contact.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Sodium carbonate (497-19-8)

Oral LD50 Rat 4090 mg/kg

Sodium hydroxide (1310-73-2)

Oral LD50 Rat 140 - 340 mg/kg; Dermal LD50 Rabbit 1350 mg/kg

Sodium sulfide (1313-82-2)

Oral LD50 Rat 208 mg/kg

Sodium hydrosulfide (16721-80-5)

Oral LD50 Rat 96 mg/kg; Inhalation LC50 Rat 1500 mg/m3 14 min

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Ammonia (7664-41-7)

Oral LD50 Rat 350 mg/kg (test substance administered in an aqueous solution); Inhalation LC50 Rat 2000 ppm 4 h

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 700 mg/m3 4 h

Product Toxicity Data

Acute Toxicity Estimate

Dermal	847.9672 mg/kg
Oral	488.6018 mg/kg

Immediate Effects

Harmful if swallowed, Harmful in contact with skin, skin burns, eye damage, respiratory system damage, respiratory tract irritation, central nervous system damage, cardiovascular system damage

Delayed Effects

Respiratory system damage, lung damage, respiratory sensitization

Irritation/Corrosivity Data

Eye burns, skin burns, respiratory tract irritation.

Respiratory Sensitization

May cause sensitization.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

None of this product's components are listed by ACGIH, IARC, OSHA, or NTP.

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Tumorigenic Data

No data available

Reproductive Toxicity

Based on best current information, there is no known reproductive toxicity associated with this product.

Based on best current information, there is no known teratogenicity associated with this product.

Specific Target Organ Toxicity - Single Exposure

Respiratory system, cardiovascular system, central nervous system, respiratory tract irritation

Specific Target Organ Toxicity - Repeated Exposure

Respiratory system, lung damage

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

Respiratory disorders, skin disorders, eye disorders, central nervous system disorders, cardiovascular system disorders

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life.

Component Analysis - Aquatic Toxicity

Sodium carbonate	497-19-8

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Fish:	LC50 96 h Lepomis macrochirus 300 mg/L [static]; LC50 96 h Pimephales promelas 310 - 1220 mg/L [static]
Invertebrate:	EC50 48 h Daphnia magna 265 mg/L IUCLID
Sodium hydroxide	1310-73-2
Fish:	LC50 96 h Oncorhynchus mykiss 45.4 mg/L [static]
Sodium sulfide	1313-82-2
Fish:	LC50 96 h Poecilia reticulata 7.7 - 29.1 mg/L
Invertebrate:	EC50 48 h Daphnia magna 2.1 mg/L IUCLID
Ammonia	7664-41-7
Fish:	LC50 96 h Cyprinus carpio 0.44 mg/L; LC50 96 h Lepomis macrochirus 0.26 - 4.6 mg/L; LC50 96 h Lepomis macrochirus 1.17 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.73 - 2.35 mg/L; LC50 96 h Pimephales promelas 5.9 mg/L [static]; LC50 96 h Poecilia reticulata >1.5 mg/L; LC50 96 h Poecilia reticulata 1.19 mg/L [static]
Invertebrate:	LC50 48 h Daphnia magna 25.4 mg/L IUCLID
Hydrogen sulfide	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal. If released, product contains some reactive sulfide which may be in sufficient quantity to meet the definition of D003.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (Hydrogen sulfide, sodium hydroxide)

Hazard Class: 6.1 (8) UN/NA #: UN3289

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Material Name: Sulfidic Caustic Solution SDS ID: 82988

Packing Group: II

Required Label(s): 6.1 (8) Corrosive Toxic

Further information: Required Placard(s): Toxic (Corrosive placard may be displayed per 172.505(d) but is not

required).

IATA Information:

Shipping Name: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (Contains: Hydrogen sulfide, Sodium

hydroxide)

Hazard Class: 6.1 (8) **UN#:** UN3289

Packing Group: II

Required Label(s): 6.1 (8) Corrosive Toxic

Further information: Required Placard(s): Toxic (Corrosive placard may be displayed per 172.505(d) but is not

required).

IMDG Information:

Shipping Name: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (Contains: Sodium hydroxide, Hydrogen

sulfide)

Hazard Class: 6.1 (8) **UN#:** UN3289

Packing Group: II

Required Label(s): 6.1 (8) Corrosive Toxic

Further information: Required Placard(s): Toxic (Corrosive placard may be displayed per 172.505(d) but is not

required).

TDG Information:

Shipping Name: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (Hydrogen sulfide, Sodium Hydroxide)

Hazard Class: 6.1 (8) UN#: UN3289 Packing Group: II

Required Label(s): 6.1 (8) Corrosive Toxic

Further information: Required Placard(s): Toxic (Corrosive placard may be displayed per 172.505(d) but is not

required).

International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Sodium hydroxide	1310-73-2
IBC Code:	Category Y (solution)
Sodium hydrosulfide	16721-80-5
IBC Code:	Category Z (<=45% solution)

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

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Sodium hydroxide	1310-73-2
CERCLA:	1000 lb final RQ ; 454 kg final RQ
Sodium hydrosulfide	16721-80-5
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
Ammonia	7664-41-7
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	10000 lb TQ (anhydrous); 15000 lb TQ (solution ,>44% Ammonia by weight)
SARA 304:	100 lb EPCRA RQ
Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Acute toxicity; Skin Corrosion/Irritation; Respiratory/Skin Sensitization; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	
Sodium hydroxide	1310-73-2	Yes	Yes	Yes	Yes	Yes	
Sodium sulfide	1313-82-2	No	Yes	No	Yes	No	
Sodium hydrosulfide	16721-80-5	Yes	Yes	No	Yes	Yes	
Ammonia	7664-41-7	Yes	Yes	Yes	Yes	Yes	
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes	

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed under California Proposition 65.

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Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Sodium carbonate	497-19-8								
	1 %								
Sodium hydroxide	1310-73-2								
	1 %								
Sodium hydrosulfide	16721-80-5								
	1 %								
Ammonia	7664-41-7								
	1 %								
Hydrogen sulfide	7783-06-4								
	1 %								

WHMIS Classification

D1B, E

Component Analysis - Inventory

Water (7732-18-5)

US	CA	EU	AU	РН	JP - ENCS	JP -	KECI -	KR KECI - Annex 2	REACH	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Sodium carbonate (497-19-8)

US	CA	EU	AU	PH	JP - ENCS			KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

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	Sodium	hydroxide	(1310-73-2)
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US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Sodium sulfide (1313-82-2)														
US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
	Sodium hydrosulfide (16721-80-5)													
US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
	Ammonia (7664-41-7)													
US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex	KR KECI - Annex	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)

US	CA	EU	AU	РН	JP - ENCS		KECI -	KR KECI - Annex 2	REACH	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP -	KECI -	KR KECI - Annex 2	REACH	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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Summary of Changes

2021-07-01: Regulatory review and update.

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC -European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F -Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG -International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID -International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIstsTM - ChemADVISOR's Regulatory Database; MAK -Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne-Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada): NTP - National Toxicology Program: NZ - New Zealand: OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc -Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG -Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer:

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.

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