ESSENTIAL CHEMISTRY. INNOVATIVE SOLUTIONS.

SAFETY DATA SHEET

Print Date: March 19, 2025

Section 1: Product & Company Information

Product Identifier: **Potassium Hydroxide, Flake**

Other Means of Identification

Product Number: 131250

Recommended Use and Restrictions on Use

Recommended Use: Intermediate, Neutralizing, detergent.
Restrictions on Use: Use only in closed systems.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918
USA

Information Telephone Number: 1-865-524-4239
Fax Number: 1-865-524-3375
Website: www.corecheminc.com
Contact Person: Regulatory Manager
E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 *(monitored 24 hours/day)*

Section 2: Hazards Identification

GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)

Corrosive to Metals - 1

Health Hazard(s)

Acute Toxicity, Oral - 4
Corrosion/Irritation, Skin – 1A
(Corrosion)Damage/Irritation, Eye - 1

Environmental Hazard(s)

Aquatic, Acute - 3

Label Elements

Signal Word

DANGER

Hazard Symbol(s)

Hazard Statement(s)

H290: May be corrosive to metals.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H402 Harmful to aquatic life.

Precautionary Statements

General

Not applicable.

Prevention

P234: Keep only in original container.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P321: Specific treatment (see supplemental first aid instructions on this label).
P330: Rinse mouth.
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.

Storage

P405: Store locked up.
P406: Store in corrosive resistant container with a resistant inner liner.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity [2]	Common Name/Synonym(s)	CAS # [3]	Weight %	Impurity or Stabilizing Additive
Potassium Hydroxide	Caustic Potash, KOH Dry, Caustic Potash – Anhydrous	1310-58-3	≤100%	No

1. Information regarding the composition and the percentage ranges of the mixtures ingredients are not presented as its Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
3. "— "Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Ensure that eyewash stations and safety showers are close to the workstation.

Inhalation

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult administer oxygen. If breathing is irregular or stopped administer artificial respiration. Keep the victim calm and in an upright position. Consult a physician.

Skin Contact

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist call a physician.

Eye Contact

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

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Symptoms

Burn, respiratory tract irritation.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Treat symptomatically.

Section 5: Fire-Fighting Measures

General Fire Hazards

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agents appropriate for surrounding fires. Use water spray to keep containers cool.

Unsuitable Extinguishing Media

No data available.

Specific Hazards Arising from the Chemical

May release toxic irritating and/or corrosive gases. In the event of fire or explosion do not breathe fumes.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

No data available.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with skin, eyes and clothing. Wear appropriate personal protective equipment. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

Methods and Materials for Containment and Clean-Up

Do not use a water jet. Neutralize with acid. Flush away traces with water. Shovel up residues and place them in a labeled sealable container for subsequent safe disposal. Put leaking container into a labeled drum or over drum.

Small spills: Sweep up and shovel into suitable container.

Large Spills: Contain spill. Salvage as much re-useable material as possible into a suitable container. Sweep up and shovel material into a container for disposal according to regulations.

Notification Procedures

Notify the Fire brigade and police immediately.

Environmental Precautions

Isolate the sources of the spill(s) leak(s) and evacuate all personnel from danger area. Mark roads and warn other road users and passers-by. Contain any spill with dikes or absorbents to prevent migration and entry into sewers and drains.

Section 7: Handling and Storage

Precautions for Safe Handling

Do not get in eyes or on skin. Do not breathe dust or aerosols. Keep container closed and tightly sealed when not in use. Avoid formation of dust and aerosols.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. May be corrosive to metals. Store in corrosive resistant container with resistant inner liner.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Chemical Name	Type	Value	Rater
Potassium Hydroxide	-	2 mg/m3	ACGIH
Potassium Hydroxide	-	2 mg/m3	OSHA

Occupational Exposure Limits

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Use Product only in closed system. Training in proper use of PPE provided and ensured via an inspection policy. Organizational measures to avoid touching equipment surfaces covered with the substance. Provide sufficient air exchange and/or exhaust in work rooms. Mechanical ventilation.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Wear safety glasses with side shields or goggles.

Skin Protection

Hand Protection

Gloves resistant to chemical permeation.

Other

Wear protective clothing. Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection. In the case of dust or aerosol formation use respirator with an approved filter.

Hygiene Measures

When using, do not eat, drink or smoke. 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. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:

Physical State:	Solid, flakes
Color:	White, Off-White
Odor:	Odorless
Odor Threshold:	Negligible.
pH:	Ca. 13.5 (77°F / 25°C) concentration 5,611 g/l
Melting Point/Freezing Point:	406 °C / 763°F
Initial Boiling Point and Boiling Range:	1327°C@1013 hPa
Flash Point:	Not applicable.
Evaporation Rate (butyl acetate=1)**:**	No data available.
Flammability (solid, gas):	Not applicable.
Upper/Lower Limit on Flammability or Explosive Limits	
Flammability Limit – Upper:	Not applicable.
Flammability Limit – Lower:	Not applicable.
Explosive Limit – Upper:	Not applicable.
Explosive Limit – Lower:	Not applicable.
Vapor Pressure:	Negligible.
Vapor Density (air =1)**:**	Not applicable.
Relative Density (water=1)**:**	2.044
Solubility(ies):	
Solubility in water:	121g/100g @ 25°C
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
Auto-Ignition Temperature:	None.
Decomposition Temperature:	No data available.
Viscosity:	Not applicable.
Hygroscopic:	No data available.

Other Information:

Molecular Weight:	56.1 g/mol
Formula:	No data available.

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions normal use.

Chemical Stability

Stable under normal conditions and temperature.

Possibility of Hazardous Reactions

Exothermic reaction with strong acids. Reacts violently with water. May be corrosive to metal. Contact with metals liberates hydrogen gas.

Conditions to Avoid

Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas.

Incompatible Materials

Flammable liquids, water, acids, halogenated compounds, and prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc, or other alkali sensitive metals or alloys.

Hazardous Decomposition Products

When combusted, oxides of potassium.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: May cause irritation of the membranes of the mouth and throat, stomach pain, and possible ulceration.
Inhalation: May cause burns, cough, and pulmonary edema, up to 48 hours after exposure. Avoid breathing vapors.
Skin Contact: May cause severe skin irritation and reddening of the skin. Prolonged exposure may cause burns, blistering.
Eye Contact: May cause severe irritation such as burns, and eye damage.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Acute toxicity estimate: 588.24 mg/kg
Potassium Hydroxide: LD50 (Rat): 333-388 mg/kg

Dermal

No data available.

Inhalation

No Data Available

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

Species: Rabbit
Result: Causes severe Burns

Serious Eye Damage/Eye Irritation

Species: Rabbit
Result: No eye irritation

Respiratory/Skin Sensitization

Species: Guinne Pig
Result: not sensitization.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

No data available.

In Vivo

No data available.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity – Single Exposure

No data available.

Specific Target Organ Toxicity – Repeated Exposure

No data available.

Aspiration Hazard

No data available.

Other Effects

No data available.

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h

Aquatic Invertebrates

ınjustified.

Toxicity to Aquatic Plants

ınjustified.

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability

Biodegradation

This material is inorganic and not subject to biodegradation.

BOD/COD Ratio

No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Bioaccumulation is unlikely.

Partition Coefficient n-octanol / water (log Kow)

ly unjustified.

Mobility in Soil
No data available.

Other Adverse Effects
No data available

Section 13: Disposal Considerations

Disposal Instructions
Dispose of contents/ container to an approved facility in accordance with local, regional, national, and international regulations.
Chemical waste generators must determine at the time of disposal, whether a discarded chemical is classified as a hazardous waste. Chemical additions, processing or otherwise altering this material may make waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. The transportation, storage, treatment and disposal of this waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Contaminated Packaging
Dispose of containers in accordance with applicable local, regional, national, and/or international regulations.

US Department of Transportation (DOT)

UN Number:	UN1813
UN Proper Shipping Name:	Potassium hydroxide, solid
Technical Name:	-
Hazard Class:	8
Subsidiary Hazard Risk:	-
Packing Group:	II
DOT Label/Placard Exemptions:	Not determined
Special Provisions:	IB8, IP2, IP4, T3, TP33
Packaging Exceptions:	49CFR 173.154
Packaging Non-Bulk:	49CFR 173.212
Packaging Bulk:	49CFR 173.240
Reportable Quantity (RQ):	1,000lb (454kg)
Marine Pollutant:	No
Poison Inhalation Hazard:	No
Special precautions for user:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Emergency Response Guidebook (ERG) #:	154

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)
This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)
The following chemical(s) in this material are subject to reporting levels established by CERCLA:
Potassium Hydroxide (CAS# 1310-58-3)

Clean Air Act (CAA), Section 112(r)
No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance
No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification
No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard:	Yes
Sudden Release of Pressure:	No
Reactive:	No
Acute (Immediate) Health Hazard:	Yes
Chronic (Delayed) Health Hazard:	No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 3
Chronic Health Hazard: /
Flammability: 0
Physical Hazard: 4
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0
Special: N/A
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
EC50 - Effective concentration, 50%
IDHL – Immediately Dangerous to Life and Health
Kg – Kilogram
l – Liter
lb – Pound
LC50 - Lethal Concentration, 50%
LD50 - Lethal Dose, 50%
mg - milligram
ml – milliliter
N/A – Not Applicable
N/D – Not Determined
PEL – Permissible Exposure Limit
REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TWA - Time weighted average
ACGIH - American Conference of Industrial Hygienists
AIHA – American Industrial Hygiene Association
BEI - Biological Exposure Indices
CAS – Chemical Abstracts Service
DOT – US Department of Transportation
EPA – US Environmental Protection Agency
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC - Intermediate Bulk Container
IMDG - International Maritime Dangerous Goods
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OSHA – US Occupational Health and Safety Administration
SARA – US EPA Superfund Amendments and Reauthorization Act
TSCA – US EPA Toxic Substances Control Act
UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

The information in this SDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product

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