



SAFETY DATA SHEET

Name of Product:

PCKH

Product #: See Section 1

Revision Date: June 1, 2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PCKH
SYNONYMS: KOH, caustic potash, potash, pearl ash
PRODUCT CODES: I000014, I000079, I000136

MANUFACTURER: NACHURS ALPINE SOLUTIONS
DIVISION: Marion
ADDRESS: 421 Leader Street
Marion, OH43302, United States

PHONE: 800-622-4877 (USA)
800-265-2268 (CANADA)

EMERGENCY PHONE: United States: Chemtrec: 800-424-9300 (CCN#15189)
Canada: CANUTEC: 1-613-996-6666
I TECH: 877-324-4402

CHEMICAL NAME: Potassium Carbonate/Potassium Hydroxide
CHEMICAL FAMILY: Alkali
CHEMICAL FORMULA: K_2CO_3/KOH

PRODUCT USE: Mining Fluid, pH adjustment

SECTION 2: HAZARDS IDENTIFICATION

GHS ELEMENTS:

Hazard Classification: Acute Toxicity Oral (Category 4).
Acute Toxicity Inhalation (Category 4).
Skin Corrosion (Category 1B).
Serious Eye Damage (Category 1).
Target Organ Toxicity – Single Exposure - Inhalation (Category 3).
Corrosive to Metals (Category 1).
Acute Hazard to the Aquatic Environment (Category 3).
Chronic Hazard to the Aquatic Environment (Category 3).

Pictogram:



Signal Word: Danger

Hazard Statements: Harmful if swallowed or inhaled.
Causes severe skin burns and serious eye damage.
May cause respiratory irritation.
May be corrosive to metals.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements: Wash skin thoroughly after handling. Wear protective gloves, clothing, eye and face protection.
Avoid breathing dusts, mists or sprays. Use only outdoors or in a well ventilated area.
Do not eat, drink or smoke when using this product.
If swallowed, rinse mouth. Do NOT induce vomiting.
If on hair or skin, immediately remove all contaminated clothing and rinse skin with water or shower.
If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If in eyes, rinse carefully with water for several minutes. Remove contact lenses, if able and continue rinsing.
Immediately call a poison center or doctor/physician. See First Aid instruction for specific treatment.
Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **PCKH**

Revision Date: June 1, 2015

Store in a secured, well ventilated location. Store in the original container or in a corrosive resistant or container with resistant inner liner. Keep containers tightly closed.
Dispose of contents or containers in accordance with all local, state and federal laws.

POTENTIAL HEALTH EFFECTS

EYES: May cause serious eye damage, irritation, redness, burning of the eye, lids and conjunctiva. Treat immediately.
SKIN: May cause redness, irritation, burning, swelling, blister formation or first, second or third degree burns. Treat immediately.
INGESTION: May cause to the digestive and respiratory tract. Drink plenty of water.
INHALATION: May cause irritation, cough or redness to upper respiratory.

ACUTE HEALTH HAZARDS: Skin corrosion and serious eye damage possible. Moderate irritation from inhalation or ingestion.

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: May aggravate preexisting conditions of the eye or skin.

CARCINOGENICITY:

OSHA: N/A
ACGIH: N/A
NTP: N/A
IARC: N/A
OTHER: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:		<u>CAS#</u>
	Potassium Hydroxide	1310-58-3
	Potassium Carbonate	584-08-7
	Water	7732-18-5

OSHA PEL-TWA: N/A
OSHA PEL STEL: N/A
OSHA PEL CEILING: 2 mg/m³

ACGIH TLV-TWA: N/A
ACGIH TLV STEL: N/A
ACGIH TLV CEILING: 2 mg/m³

SECTION 3 NOTES: Variable mixture depending on vendor specification. Corrosive to skin and eyes.

SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. Seek immediate medical attention.

SKIN: Flush with water immediately and thoroughly for 15 minutes while removing contaminated clothing. Seek immediate medical attention. Wash contaminated clothing before reuse. Discard contaminated shoes and leather belts.

INGESTION: If swallowed, DO NOT INDUCE VOMITING. If conscious, give large quantities of water. If vomiting occurs spontaneously, keep airway clear and give more water. Seek immediate medical attention.

INHALATION: If inhaled, remove to fresh air. If person is not breathing, perform artificial respiration if trained. Seek immediate medical attention.

SECTION 3 NOTES: Avoid contact with eyes and skin. Do not breathe in dusts. Do not ingest.

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **PCKH**

Revision Date: June 1, 2015

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: UPPER: N/A
(% BY VOLUME) LOWER: N/A

FLASH POINT: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION:

HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 1
OTHER: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 1
PROTECTION: B

EXTINGUISHING MEDIA: Non-flammable. Use extinguishing media suitable for surrounding material.

SPECIAL FIRE FIGHTING PROCEDURES: Use water to cool containers but avoid getting water into containers. Wear NIOSH approved positive-pressure self contained breathing apparatus (SCBA) and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Although this product does not meet the parameters for flammability, it is exothermic in contact with water.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide gas can form upon contact with reducing sugars, food and beverage products and create hazardous conditions in enclosed poorly ventilated spaces.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Avoid breathing in dusts, mists or sprays. Do not contact with eyes or skin. Wash thoroughly after handling. Wear appropriate personal protective equipment as recommended in Section 8.

Confine the spill to a diked area or sump, if possible, and recover as much of the liquid potassium carbonate as possible. Place in suitable containers. Flush area with water, as appropriate. Keep out of water supply and sewers. Report as required.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Do not store and/or transfer in tanks, lines and other equipment constructed or materials not specifically designed and approved for potassium hydroxide service. Under normal conditions, this product can be stored and/or transferred in mild steel materials. Do not use aluminum.

OTHER PRECAUTIONS: Always follow good safety and industrial hygiene practices.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Provide adequate ventilation for local areas.

RESPIRATORY PROTECTION: Respiratory protection is not required under normal circumstances. If material is misted or generates carbon dioxide, use appropriate NIOSH approved respirator or self-contained breathing apparatus.

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **PCKH**

Revision Date: June 1, 2015

EYE PROTECTION: Chemical splash goggles and full face shield.

SKIN PROTECTION: Rubber gloves, rubber footwear, and chemical resistant full body suit when appropriate.

OTHER PROTECTIVE CLOTHING/ EQUIPMENT: Eyewash and safety showers located in work area.

WORK HYGIENIC PRACTICES: Always follow good safety and industrial hygiene practices.

EXPOSURE GUIDELINES: See Section 3.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, nearly colorless liquid.

ODOR: No distinct odor.

ODOR THRESHOLD: No data available.

PHYSICAL STATE: Liquid

pH AS SUPPLIED: >13

MELTING POINT: N/A

FREEZING POINT: Unknown

BOILING POINT: Unknown

FLASH POINT: N/A

METHOD USED: N/A

EVAPORATION RATE: N/A

FLAMMABLE LIMITS IN AIR:
(% BY VOLUME) UPPER: N/A
LOWER: N/A

VAPOR PRESSURE (mmHg): No data available.

VAPOR DENSITY (AIR = 1): No data available.

SPECIFIC GRAVITY (20°C): 1.35-1.50

DENSITY, LBS/GAL (20°C): 11.2-12.5

SOLUBILITY IN WATER: Complete

PARTITION COEFFICIENT: n-octanol/water – N/A

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): None

AUTOIGNITION TEMPERATURE: N/A

VISCOSITY: N/A

SAFETY DATA SHEET

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SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Avoid contact with acids; corrosive to tin, aluminum, zinc and their alloys.	
INCOMPATIBILITY (MATERIAL TO AVOID):	Avoid contact with acids, organic halogen compounds, or organic nitro compounds.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide gas can form upon contact with reducing sugars, food and beverage products and create hazardous conditions in enclosed poorly ventilated areas.	
HAZARDOUS POLYMERIZATION:	Will not occur.	

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	LD50 Oral (Rat) – 1870 mg/kg LD50 Dermal (Rabbit) - >2000 mg/kg LD50 Inhalation (Rat, 4.5 h) - >4.96 mg/L
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SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Do not allow into drinking water. Harmful to aquatic life and causes long lasting effects.

Aquatic Toxicity:	Rainbow Trout LC50 – 68 mg/L, 96 h Bluegill Sunfish LC50 – 230 mg/L, 96 h Flathead minnow LC50 – 940 mg/L, 24h; 820 mg/L, 48h; <510 mg/L, 96h
Invertebrate Toxicity:	EC50 Daphnia magna – 430 mg/L, 48 h (hard water) EC50 Daphnia pulex – 200 mg/L, 48 h (soft water)

SECTION 12 NOTES: This material is not considered to be bio-accumulative or environmentally persistent. May increase the pH of waterways and adversely affect aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	Reclaim and reuse as much as possible. Dispose in accordance with all federal, state, and local regulations.
RCRA HAZARD CLASS:	D002 Corrosive
SECTION 13 NOTES:	Measure pH to fully determine disposal measures.

SAFETY DATA SHEET

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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

PROPER SHIPPING NAME: Potassium Hydroxide Solution
HAZARD CLASS: 8
ID NUMBER: UN 1814
PACKING GROUP: II
LABEL STATEMENT: Corrosive
Health: 3 Flammability: 0 Reactivity: 1 Specific: None

WATER TRANSPORTATION (IMO):

PROPER SHIPPING NAME: Potassium Hydroxide Solution
HAZARD CLASS: 8
ID NUMBER: UN 1814
PACKING GROUP: II
LABEL STATEMENTS: Corrosive
Health: 3 Flammability: 0 Reactivity: 1 Specific: None

AIR TRANSPORTATION (IATA):

PROPER SHIPPING NAME: Potassium Hydroxide Solution
HAZARD CLASS: 8
ID NUMBER: UN 1814
PACKING GROUP: II
LABEL STATEMENTS: Corrosive
Health: 3 Flammability: 0 Reactivity: 1 Specific: None

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not regulated
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): Not regulated
311/312 HAZARD CATEGORIES: Not regulated
313 REPORTABLE INGREDIENTS: Not regulated

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: *Technical Services*

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