

Material Safety Data Sheet

pH +

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: pH +
PRODUCT CODES:

MANUFACTURER: NSA, LLC
5585 E. Shelby Dr.
Memphis, TN 38141

EMERGENCY PHONE: CHEMTREC 1-800-262-8200
OTHER CALLS: 407-358-8596

CHEMICAL NAME: pH +
CHEMICAL FORMULA:

CHEMICAL FAMILY: Base

GENERAL/GENERIC ID: Liquid Fertilizer

UPDATED BY: _____

Section 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: The percentage of mixture information for pH Up is withheld as a trade secret. The basic ingredients of pH Up are potassium carbonate, potassium hydroxide, and potassium silicate.

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
1310-58-3	6-7 <u>ppm</u>	6-7 <u>mg/m3</u>	Potassium Hydroxide
OSHA PEL-TWA:			
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

ROUTES OF ENTRY:

Inhalation: Yes

Skin: Yes

Ingestion: Yes

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation or dermatitis in sensitive individuals.

INGESTION: Causes burns

INHALATION: May cause sever irritation of rht respiratory tract with caughing, choking, pain and possibly burns of the mucous membranes

CHRONIC AND ACUTE HEALTH HAZARDS: Eye contact causes serious damage. Prolonged contact with skin causes serious burns.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Agrravated by Exposure: Respiratory system(including asthma and other breathing disorders)

HAZARDS IDENTIFICATION

PHYSICAL HAZARDS: Mixing with water, acid or incompatible materials may cause splattering and release of heat. Do

not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated.

ECOLOGICAL HAZARDS: This material has exhibited moderate toxicity to aquatic organisms.

PRECAUTIONARY STATEMENTS: Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Keep

container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation

OSHA: No

NTP: No

IARC: No

OTHER:

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Section 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Flush with water for 15 minutes. Get medical attention if irritation persists.

SKIN: Flush with water for 15 minutes. Get medical attention if irritation persists.

INGESTION: Do not induce vomiting, contact a physician or poison control center immediately. Offer small amounts of water or milk.

INHALATION:

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SIGNS AND SYMPTOMS OF EXPOSURE: Eye irritation. Dry and/or red itchy skin.

Section 4 NOTES: **FIRST AID MEASURES**

INGESTION: Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting.

Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops.

GET MEDICAL ATTENTION IMMEDIATELY.

Notes to Physician: The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of

actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE-FIGHTING MEASURES

Fire Hazard: 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.

Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Fire Fighting: Move container from fire area if it can be done without risk. Cool containers with water. Wear NIOSH

approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Avoid contact with skin.

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Flash point: Not flammable

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Occupational Release:

Wear appropriate personal protective equipment recommended in Section 8 of the SDS. Completely contain spilled

material with dikes, sandbags, etc. Keep out of water supplies and sewers. Liquid material may be removed with a vacuum truck. Flush spill area with water, if appropriate. This material is alkaline and may raise the pH of surface waters

with low buffering capacity. Releases should be reported, if required, to appropriate agencies.

Section 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry area. Keep container closed when not in use. Keep Out Of Reach Of Children.

OTHER PRECAUTIONS:

Section 7 NOTES:

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SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION: Adequate ventilation required to maintain a fresh air flow.

RESPIRATORY PROTECTION: If mist or dust conditions should be present use respirator approved by NIOSH.

EYE PROTECTION: Goggles or face shield.

SKIN (Hands, Arms, and Body) PROTECTION: Adequate clothing should be worn to prevent skin contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye bath, safety shower and oxygen mask.

WORK HYGIENIC PRACTICES: Wash all clothing before wearing. Wash all exposed skin surfaces with soap and water after using this product.

EXPOSURE GUIDELINES:

LOCAL EXHAUST: Adequate

Section 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: blue

ODOR:

PHYSICAL STATE: liquid

pH OF CONCENTRATE: 15.53

BOILING POINT:

MELTING POINT: 50 F: 15 C:

FREEZING POINT: 32 F: 0 C:

VAPOR PRESSURE (mmHg):

VAPOR DENSITY (AIR = 1):

SPECIFIC GRAVITY (H₂O = 1):

EVAPORATION RATE:

BASIS (=1):

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: Complete

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N?A

BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC):

WITH WATER: 9.6 LBS/GAL

WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT:

VISCOSITY:

@

F:

C:

Section 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable.

CONDITIONS TO AVOID (STABILITY): 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. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces

INCOMPATIBILITY (MATERIAL TO AVOID): Acids, Flammable liquids, Halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide and Carbon Dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

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CONDITIONS TO AVOID (POLYMERIZATION): None

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: N/A

Section 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Aquatic Toxicity:

This material is alkaline and may raise the pH of surface waters with low buffering capacity.

This material has exhibited moderate toxicity to aquatic organisms.

Freshwater Fish Toxicity:

LC50 (Mosquito fish): 80 mg/L/96 hr (static bioassay in fresh water at 18-19 C)

LC50 (Fathead Minnow): 179 mg/L/96 hr (static at 22.3-24.7 C)

Invertebrate Toxicity:

EC50 (Daphnia magna): 60 mg/L/48 hr (static bioassay at 20.3-20.7 C)

Algae Toxicity:

ErC50 (Selenastrum capricornutum): 61 mg/L/96 hr (static bioassay at 23-23.9 C)

FATE AND TRANSPORT:

BIODEGRADATION: This material will disassociate into ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize this material.

BIOCONCENTRATION: This material will not bioconcentrate.

ADDITIONAL ECOLOGICAL INFORMATION:

This material has exhibited slight toxicity to terrestrial organisms.

SECTION 13: DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: If product can not be disposed of according to use directions on label. Dispose of in accordance with local, state, and federal regulations.

RCRA HAZARD CLASS:

Section 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S.DOT 49 CFR 172.101:

PROPER SHIPPING NAME: pH +, solution

UN NUMBER: UN1814

HAZARD CLASS/ DIVISION: 8

PACKING GROUP: II

LABELING

REQUIREMENTS:

8

DOT RQ (lbs): RQ 1,000 Lbs. (Potassium hydroxide)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

SHIPPING NAME: PH UP, solution

UN NUMBER: UN1814

CLASS OR DIVISION: 8

PACKING/RISK

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SECTION 15: REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200) (US)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component CERCLA Reportable Quantities:

Potassium hydroxide 1000 lb (final RQ)

EPCRA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.21):

Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65): Not regulated.

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119): Not regulated

FDA: This material has Generally Recognized as Safe (GRAS) status under specific FDA regulations. Additional information is available from the Code of Federal Regulations which is accessible on the FDA's website.

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt

TSCA 12(b): This product is not subject to export notification

Canadian Chemical Inventory: All components are listed **Section 15 NOTES: Not Regulated.**

SECTION 16: OTHER INFORMATION:

OTHER INFORMATION:

PREPARATION INFORMATION: HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health: 3 Flammability: 0 Reactivity: 1

NFPA 704 - Hazard Identification Ratings (SCALE 0-4)

Health: 3 Flammability: 0 Reactivity: 1

IMPORTANT:

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