SAFETY DATA SHEET

HTH pH Plus
Version 1.0
MSDS Number: 000000022150
Revision Date: 04/22/2015

SECTION 1. IDENTIFICATION

Product name : HTH pH Plus
Product code : 000000022150

Manufacturer or supplier’s details
Company name of supplier : Arch Chemicals, Inc.
90 Boroline Road
Allendale, NJ
07401

Telephone : FOR ANY EMERGENCY, CALL 24 HOURS/7DAYS: 1-800-654-6911 (OUTSIDE USA: 423-780-2970) FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1-800-424-9300 FOR ALL MSDS QUESTIONS & REQUESTS: 1-800-511-MSDS

Recommended use of the chemical and restrictions on use
Recommended use : Water treatment chemical

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity (Inhalation) : Category 4
Eye irritation : Category 2A
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS Label element
Hazard pictograms :

Signal word : Warning
Hazard statements : H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statements
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
Response: P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Carbonate

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>99.8 - 100.00</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

If inhaled : IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

In case of skin contact : IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention.

In case of eye contact : IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

If swallowed : IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Choose extinguishing media suitable for surrounding materials.

Specific hazards during firefighting : Material will not ignite or burn.
Flammability (solid, gas): Product is not known to be flammable, combustible, pyrophoric or explosive.

Further information: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Environmental precautions:

Air: Keep people away from and upwind of spill/leak.

Water: This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Soil: Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Do not place spill materials back in their original containers. After removal, flush contaminated area thoroughly with water.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing dust from this material.

Conditions for safe storage: Store in a cool, dry place. Isolate from incompatible materials.

Materials to avoid: Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Engineering measures: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Personal protective equipment

Hand protection

Remarks: Wear impervious gloves to avoid skin contact. A safety shower should be provided in the immediate work area.

Eye protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.
Skin and body protection: Natural rubber, Neoprene, Nitrile

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid
Colour: white
Odour: None
pH: 11.4, 1% solution
Flash point: Not applicable
Evaporation rate: Not applicable
Upper explosion limit: Not applicable
Lower explosion limit: Not applicable
Vapour pressure: Not applicable
Relative vapour density: Not applicable
Relative density: 1.04
Density: No data

Solubility(ies)
Water solubility: 212.5 g/l
Partition coefficient: n-octanol/water: Not applicable

Decomposition temperature: No data

Viscosity
Viscosity, dynamic: Not applicable

Oxidizing properties: No data

Molecular weight: 105.99 g/mol

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions: Stable under normal conditions. Product will not undergo hazardous polymerization.

Conditions to avoid: High temperatures
Exposure to moist air or water

Incompatible materials: Aluminum powder
Hazardous decomposition products: acids
Carbon monoxide, Carbon dioxide
Sodium oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: Inhalation, skin, eyes, ingestion

Acute toxicity
Acute oral toxicity (LD50): 4,090 mg/kg
Species: Rat

Acute inhalation toxicity (Inhalation LC50): 4.6 mg/l
Species: Rat
Exposure time: 1 h

Acute dermal toxicity (LD50): Believed to be > 2,000 mg/kg
Species: Rabbit

Skin corrosion/irritation
Skin irritation: Assessment: mildly to moderately irritating
Remarks: May cause mild skin irritation.

Serious eye damage/eye irritation
Eye irritation: Assessment: moderately irritating
Remarks: Moderate eye irritant

Respiratory or skin sensitisation
Sensitisation: Assessment: No data
Remarks: This material is not known or reported to be a skin or respiratory sensitizer.

Carcinogenicity
IARC
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.

NTP
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.

Further information
Remarks: No additional health information available.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
no data available
Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

Other adverse effects
Additional ecological information : Practically non-toxic to fish and other aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

SECTION 14. TRANSPORT INFORMATION

IATA Not dangerous goods
UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

IMDG Not dangerous goods
UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : Marine pollutant: no

ADR Not dangerous goods
UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no
RID
UN number: Not dangerous goods
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

DOT
UN number: Not dangerous goods
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

TDG
UN number: Not dangerous goods
Proper shipping name: Not applicable
Transport hazard class: Not applicable
Packing group: Not applicable
Environmental hazards: no

Special precautions for user: none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15. REGULATORY INFORMATION

WHMIS Classification: D2B: Toxic Material Causing Other Toxic Effects
                      D1B: Toxic Material Causing Immediate and Serious Toxic Effects

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

Massachusetts Right To Know: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know: Sodium carbonate 497-19-8

New Jersey Right To Know: Sodium carbonate 497-19-8

California Prop 65: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
The components of this product are reported in the following inventories:

TSCA: The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA: 

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS III:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
</tbody>
</table>

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Revision Date: 04/22/2015

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.