PRODUCT NAME: HTH SALT POOL CARE 3-IN-1 STARTUP

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc.
501 Merritt 7 PO Box 5204
Norwalk, CT 06856-5204

REVISION DATE: 03/02/2010

SUPERCEDES:

MSDS Number: 000000011746
SYNONYMS: None
CHEMICAL FAMILY: Mixture
DESCRIPTION / USE: Swimming pool water treatment
FORMULA: NOT APPLICABLE/MIXTURE

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification: Slight Eye Irritant

Routes of Entry: Inhalation, skin, eyes, ingestion
Chemical Interactions: No known interactions
Medical Conditions Aggravated: None known or reported

Human Threshold Response Data
Odor Threshold Not established for product.
Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<table>
<thead>
<tr>
<th>Hazard Ratings</th>
<th>Health</th>
<th>Flammability</th>
<th>Physical / Instability</th>
<th>PPI / Special hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NFPA</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)
Immediate (Acute) Health Effects

Inhalation Toxicity: Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract. Not expected to be toxic by inhalation.

Skin Toxicity: Not expected to be toxic from dermal contact. Contact would be expected to cause transient redness if not washed off and left on the skin for an extended period of time. Not considered to be a primary skin irritant.

Eye Toxicity: Contact may cause mild irritation consisting of transient redness, swelling, and mucous membrane discharge to the conjunctiva. No corneal involvement or visual impairment is expected.

Ingestion Toxicity: Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Not expected to be toxic by ingestion.

Acute Target Organ Toxicity: May cause mild eye irritation. Inhalation of dust may cause mild mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The carcinogenicity of the active ingredient in this product has been evaluated through animal study and it was found not to be carcinogenic.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity. A similar product has been tested and there was no evidence of teratogenicity seen.

Inhalation: There are no known or reported effects from chronic exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Skin Absorption: There are no known or reported effects from chronic exposure.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.

Supplemental Health Hazard Information: No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS OR CHEMICAL NAME</th>
<th>CAS #</th>
<th>% RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE</td>
<td>108-80-5</td>
<td>75.0 - 80.0</td>
</tr>
<tr>
<td>Hexametaphosphate</td>
<td>68915-31-1</td>
<td>15.0 - 19.0</td>
</tr>
</tbody>
</table>
Aluminum Sulfate  17927-65-0  5.0 - 7.0

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.

Skin Contact: IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.

Eye Contact: IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

Ingestion: IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties
Flash Point: Not applicable
Autoignition Temperature: Not applicable
Fire / Explosion Hazards: Material will not ignite or burn.
Extinguishing Media: Not Applicable. - Choose extinguishing media suitable for surrounding materials.

Fire Fighting Instructions: 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. Use water to cool containers.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Upper Flammable / Explosive Limit, % in air: Not applicable
Lower Flammable / Explosive Limit, % in air: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures
Air Release: Contain all solids for treatment or disposal.
Water Release: 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.

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

Additional Spill Information: Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid inhalation of dust and fumes.

Storage: Store in a cool, dry and well ventilated place. Keep containers tightly closed when not in use.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection: Wear a NIOSH approved respirator if levels above the exposure limits are possible.

Respirator Type: Wear a NIOSH approved N95 respirator.

Skin Protection: Wear impervious gloves to avoid skin contact.

Eye Protection: Use safety glasses with side shields.

Protective Clothing Type: Impervious

General Protective Measures: Emergency eyewash should be provided in the immediate work area.

Exposure Limit Data

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>Name of Limit</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE</td>
<td>108-80-5</td>
<td>WEEL</td>
<td>10 mg/m³ TWA Total</td>
</tr>
<tr>
<td>1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE</td>
<td>108-80-5</td>
<td>WEEL</td>
<td>5 mg/m³ TWA Respirable</td>
</tr>
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</table>
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State:</td>
<td>solid</td>
</tr>
<tr>
<td>Form</td>
<td>Powder</td>
</tr>
<tr>
<td>Color:</td>
<td>White</td>
</tr>
<tr>
<td>Odor:</td>
<td>No data</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>No data</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>No data</td>
</tr>
<tr>
<td>pH:</td>
<td>2.0 - 4.0 1% solution</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>No data</td>
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<tr>
<td>Density:</td>
<td>0.97 g/cc</td>
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<tr>
<td>Vapor Pressure:</td>
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</tr>
<tr>
<td>Vapor Density:</td>
<td>No data</td>
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<tr>
<td>Viscosity:</td>
<td>No data</td>
</tr>
<tr>
<td>Fat Solubility:</td>
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<tr>
<td>Solubility in Water:</td>
<td>Soluble</td>
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<tr>
<td>Partition coefficient n-octanol/water:</td>
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</tr>
<tr>
<td>Evaporation Rate:</td>
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<tr>
<td>Oxidizing:</td>
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<tr>
<td>Volatiles, % by vol.:</td>
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</tr>
<tr>
<td>VOC Content</td>
<td>No data</td>
</tr>
<tr>
<td>HAP Content</td>
<td>No data</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions. Product will not undergo hazardous polymerization.

Conditions to Avoid: High temperatures
Chemical Incompatibility: oxidizers
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Oxides of nitrogen, Sulphur oxides, phosphorus oxides, cyanic acid
Decomposition Temperature: No data

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Animal Toxicology</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE</td>
<td>LD50 &gt; 10,000 mg/kg Rat</td>
</tr>
<tr>
<td>Hexametaphosphate</td>
<td>LD50 = 3,053 mg/kg rat</td>
</tr>
<tr>
<td>Aluminum Sulfate</td>
<td>LD50 (anhydrous aluminum sulfate) = 6,207 mg/kg Mouse</td>
</tr>
<tr>
<td>Aluminum Sulfate</td>
<td>LD50 (anhydrous aluminum sulfate) = 1,930 mg/kg Rat</td>
</tr>
</tbody>
</table>
Dermal LD50 value:
1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE
Hexametaphosphate
Aluminum Sulfate: LD50 > 7,940 mg/kg Rabbit
no data available
LD50 (anhydrous aluminum sulfate) Believed to be > 2,000 mg/kg Rabbit

Inhalation LC50 value:
1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE
Hexametaphosphate: LC50 4 h > 3.69 MG/L rat
Aluminum Sulfate: No data

Product Animal Toxicity
Oral LD50 value: LD50 Believed to be > 5,000 mg/kg rat
Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value: no data available

Skin Irritation: Contact would be expected to cause transient redness if not washed off and left on the skin for an extended period of time. Not considered to be a primary skin irritant.
Eye Irritation: This material is expected to be slightly irritating.
Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: May cause mild eye irritation. Inhalation of dust may cause mild mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.
Subchronic / Chronic Toxicity: Target organ damage to the kidneys from ingestion due to precipitation of crystals of cyanuric acid which results in formation of kidney stones.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity. A similar product has been tested and there was no evidence of teratogenicity seen.
Mutagenicity: Not known or reported to be mutagenic. The active ingredient in this product has been tested in a battery of mutagenicity assays and was found to be non-mutagenic under the conditions of the tests.
Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The carcinogenicity of the active ingredient in this product has been evaluated through animal study and it was found not to be carcinogenic.

12. ECOLOGICAL INFORMATION
Overview: Practically non-toxic to fish and other aquatic organisms. Practically non-toxic to wildlife and domestic animals.

Ecological Toxicity Values for: 1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE
Bluegill sunfish - (static). 96 h LC50 > 2,100 mg/l
Fathead minnow (Pimephales promelas), - (static). 96 h LC50 > 2,100 mg/l
Rainbow trout (Salmo gairdneri), - (static). 96 h LC50 > 2,100 mg/l
Daphnia magna, - (static). 48 h LC50> 1,000 mg/l
Algae - 96 h EC50 = 655 mg/l
Bobwhite quail - 8 day dietary LC50 > 10,000 ppm
Mallard duck - 8 day dietary LC50 > 10,000 ppm

Ecological Toxicity Values for: Aluminum Sulfate
Largemouth bass - 96 h LC50 = 250 mg/l (anhydrous aluminum sulfate)
Mosquito fish - 96 h LC50 = 235 mg/l (anhydrous aluminum sulfate)

13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : 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.

Disposal Methods : As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : Not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Flash Point: Not applicable
Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable
15. REGULATORY INFORMATION

UNITED STATES:
Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.
EPA Pesticide Registration Number: None established
FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:
Hazard Categories Sections 311 / 312 (40 CFR 370.2):
Health Immediate (Acute) Health Hazard
Physical None

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:
ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):
ZUS_CERCLA Reportable quantity None established
ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components
ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:
CAA 112R None established

Clean Air Act Socmi:
HON SOC None established

Clean Air Act VOC Section 111:
CAA 111
US. EPA Clean Air Act (CAA) Section 111 SOCMI Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)
01 1996
CYANURIC ACID

Clean Air Act Haz. Air Pollutants Section 112:
ZUS_CAAHAP None established
ZUS_CAAHRP None established
CAA AP  None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>COMPONENT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZUSPA_RTK</td>
<td>None established</td>
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</table>

New Jersey:

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<tr>
<th>CAS #</th>
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</thead>
<tbody>
<tr>
<td>ZUSNJ_RTK</td>
<td>None established</td>
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</table>

Massachusetts:

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<tr>
<th>CAS #</th>
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</thead>
<tbody>
<tr>
<td>ZUSMA_RTK</td>
<td>None established</td>
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</table>

California Proposition 65:

<table>
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<tr>
<th>CAS #</th>
<th>COMPONENT NAME</th>
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</thead>
<tbody>
<tr>
<td>ZUSCA_P65</td>
<td>None established</td>
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</tbody>
</table>

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
96
Isocyanuric acid

16. OTHER INFORMATION

MSDS REVISION STATUS : Revised to meet the ANSI standard of 16 sections
Major References : Available upon request.