



**Arch  
Chemicals,  
Inc.**

**MATERIAL SAFETY  
DATA SHEET**

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

**PRODUCT NAME: HTH® SPA DEFOAMER ENRICHED WITH VITAMIN E**

**1. PRODUCT AND COMPANY IDENTIFICATION**

|  |                    |                        |
|--|--------------------|------------------------|
| <b>Arch Chemicals, Inc.<br/>501 Merritt 7 PO Box 5204<br/>Norwalk, CT 06856-5204</b> | REVISION DATE:     | 09/18/2008             |
|  | SUPERCEDES:        |                        |
|  | MSDS Number:       | 000000005006           |
|  | SYNONYMS:          | None                   |
|  | CHEMICAL FAMILY:   | Polydimethylsiloxane   |
|  | DESCRIPTION / USE: | Defoamer               |
|  | FORMULA:           | NOT APPLICABLE/MIXTURE |

**2. HAZARDS IDENTIFICATION**

|                             |  |
|-----------------------------|--|
| OSHA Hazard Classification: | <b>This product is not considered to be hazardous under OSHA 29 CFR 1910.1200.</b> |
|-----------------------------|--|

|                                |  |
|--------------------------------|--|
| Routes of Entry:               | This product will not exert a significant adverse effect to health from any route of exposure. |
| Chemical Interactions:         | No known or reported 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**

| <u>Hazard Ratings :</u> | <u>Health</u> | <u>Flammability</u> | <u>Physical / Instability</u> | <u>PPI / Special hazard.</u> |
|-------------------------|---------------|---------------------|-------------------------------|------------------------------|
| HMIS                    | 0             | 0                   | 0                             |                              |
| NFPA                    | 0             | 0                   | 0                             |                              |

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be irritating. Not expected to be toxic by inhalation.



Skin Toxicity: Not expected to be irritating to the skin. Not expected to be toxic from dermal contact.

Eye Toxicity: Not expected to be irritating. 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: There are no known or reported target organ effects from acute exposure.

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: No reproductive or developmental risk to humans is expected from exposure to this product. The active ingredient in this product has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.

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

Skin Contact: 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. The active ingredient in this product tested negative for skin sensitization in humans and laboratory animals.

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**

| <u>CAS OR CHEMICAL NAME</u> | <u>CAS #</u> | <u>% RANGE</u> |
|-----------------------------|--------------|----------------|
| Dimethicone                 | 63148-62-9   | 27 - 29        |
| Water                       | 7732-18-5    | 71 - 73        |

**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: This material is not expected to burn unless all the water is boiled away. The remaining compounds may be ignitable.

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.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide, Silicon oxide

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: Not applicable

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. Contain all liquids for treatment or disposal.

Land Release: Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water. Contain all liquids for treatment or disposal.

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 breathing mist or vapor.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.

Incompatible Materials for Storage: Strong oxidizing agents

Do Not Store At temperatures Above: 100 DEG°C / 212 DEG°F

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

Ventilation: Ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product.

### Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed.  
Respirator Type : Not normally required.  
Skin Protection : Wear impervious gloves to avoid skin contact.  
Eye Protection: Use safety glasses with side shields.  
Protective Clothing Type: Impervious

### Exposure Limit Data

| <u>CHEMICAL NAME</u> | <u>CAS #</u> | <u>Name of Limit</u> | <u>Exposure</u> |
|----------------------|--------------|----------------------|-----------------|
| No Data Found        |              |                      |                 |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

Physical State: liquid  
Form: Creamy liquid  
Color: White  
Odor: mild  
Molecular Weight: Not applicable/Mixture  
Specific Gravity : Approximately 1.0  
pH : 6 - 7  
Boiling Point: 100 DEG°C / 212 DEG°F  
Freezing Point: No data  
Melting Point: No data  
Density: 1.0g/cc  
Vapor Pressure: No data  
Vapor Density: No data  
Viscosity: No data  
Fat Solubility: No data  
Solubility in Water: Soluble  
Partition coefficient n-octanol/water: No data  
Evaporation Rate: No data  
Oxidizing: No data  
Volatiles, % by vol.: 69 - 74%



VOC Content                      No data  
HAP Content                      No data

## 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:      Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization.

Conditions to Avoid:                      High temperatures  
Chemical Incompatibility:                Strong oxidizing agents  
Hazardous Decomposition Products:    Carbon monoxide, Carbon dioxide, Silicon oxide  
Decomposition Temperature:            No data

## 11. TOXICOLOGICAL INFORMATION

### Component Animal Toxicology

Oral LD50 value:

Dimethicone                      LD50 > 5,000 mg/kg    rat

Dermal LD50 value:

Dimethicone                      LD50 > 2,000 mg/kg    rabbit

Inhalation LC50 value:

Dimethicone                      Inhalation LC50 1 h > 44 MG/L    rat

### Product Animal Toxicity

Oral LD50 value:                      LD50 > 5,000 mg/kg    Rat

Dermal LD50 value:                    LD50 > 2,000 mg/kg    Rabbit

Inhalation LC50                      Inhalation LC50 1 h > 44 MG/L    Rat

value:

Skin Irritation:                      Not expected to be irritating to the skin.

Eye Irritation:                        This material is expected to be non-irritating.

Acute Toxicity:                        There are no known or reported target organ effects from acute exposure.

Subchronic / Chronic                Not known or reported to cause subchronic or chronic toxicity.

Toxicity:

Reproductive and                      No reproductive or developmental risk to humans is expected from exposure  
Developmental Toxicity:                to this product. The active ingredient in this product has been tested in  
laboratory animals and no evidence of teratogenicity or fetotoxicity was  
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. The acute 96 hr. LC50 of the active ingredient in this product to fathead minnows is > 1,000 mg/l.

## 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 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   | None |
| Physical | None |



**Emergency Planning & Community Right to Know (40 CFR 355, App. A):**

**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 None established

**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:**

| CAS #     | COMPONENT NAME   |
|-----------|------------------|
| ZUSPA_RTK | None established |

**New Jersey:**

| CAS #     | COMPONENT NAME   |
|-----------|------------------|
| ZUSNJ_RTK | None established |

**Massachusetts:**

| CAS #     | COMPONENT NAME   |
|-----------|------------------|
| ZUSMA_RTK | None established |

**California Proposition 65:**

| CAS #     | COMPONENT NAME   |
|-----------|------------------|
| ZUSCA_P65 | None established |

**WHMIS Hazard Classification:**



**Arch  
Chemicals,  
Inc.**

**MATERIAL SAFETY  
DATA SHEET**

None established

## **16. OTHER INFORMATION**

---

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

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .