

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL MSDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: HTH SPA DEFOAMER

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204 REVISION DATE: 10/08/2010 SUPERCEDES: 09/21/2010

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA:

00000005006 None Polydimethylsiloxane Defoamer NOT APPLICABLE/MIXTURE

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	This product is not considered to be hazardous under OSHA 29 CFR 1910.1200.
Routes of Entry:	This product will not exert a significant adverse effect to health
Chemical Interactions: Medical Conditions Age	· · · · · · · · · · · · · · · · · · ·
Human Threshold Res	ponse Data

Odor Threshold Not established for product.

Irritation Threshold Not established for product.



Hazardous Materials Identification System / National Fire Protection Association Classifications				
Hazard Ratings :	<u>Health</u>	<u>Flammability</u>	Physical / Instability	<u>PPI / Special</u> hazard.
HMIS	0	0	0	<u>Indedition</u>
NFPA	0	0	0	
Immediate (Acute) Health Effects	<u>S</u>			
Inhalation Toxicity:			expected to be toxic by in	
Skin Toxicity:	dermal contact.	-	skin. Not expected to be	
Eye Toxicity:	impairment is exp	ected.	orneal involvement or vis	
Ingestion Toxicity:	gastrointestinal d nausea, vomiting	iscomfort with an or diarrhea. Not	e gastrointestinal tract a y or all of the following s expected to be toxic by i	ymptoms: ngestion.
Acute Target Organ Toxicity:	There are no kno exposure.	own or reported ta	arget organ effects from	acute
Prolonged (Chronic) Health Effect	<u>cts</u>			
Carcinogenicity:	reference source carcinogenicity of	including IARC, (the active ingred	ted to be carcinogenic b OSHA, NTP or EPA. The dient in this product has l nd it was found not to be	been
Reproductive and			risk to humans is expec	
Developmental Toxicity:	exposure to this p tested in laborato fetotoxicity was se	ry animals and n	ve ingredient in this produce of teratogenion	uct has been city or
Inhalation:			fects from chronic expos	
Skin Contact:			fects from chronic expos	
Ingestion:	effects similar to t	those experience	fects from chronic inges d from single exposure.	
Sensitization:		tive ingredient in	rted to be a skin or respi this product tested nega atory animals.	
Chronic Target Organ Toxicity:		wn or reported ef	fects to humans from re	peated
Supplemental Health Hazard Information :	No additional hea		vailable.	



3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME	<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
Oldin Constants	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: Do Not Store At temperatures Above	Strong oxidizing agents 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.

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Eye Protection:	Use safety glasses with side shields.
Protective Clothing Type:	Impervious

CAS #

Exposure Limit Data

CHEMICAL NAME No Data Found

Name of Limit

Exposure

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liauid Form Creamy liquid White Color: Odor: mild Molecular Weight: Not applicable/Mixture Specific Gravity : Approximately1.0 pH: 6 - 7 100 DEG°C / 212 DEG°F Boiling Point: 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-No data octanol/water: 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 temperaturesChemical Incompatibility:Strong oxidizing agentsHazardous Decomposition Products:Carbon monoxide, Carbon dioxide, Silicon oxide
No data



11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:DimethiconeLD50 > 5,000 mg/kg ratComponent Animal Toxicology

 Dermal LD50 value:

 Dimethicone
 LD50 > 2,000 mg/kg rabbit

<u>Component Animal Toxicology</u> <u>Inhalation LC50 value</u>: Dimethicone Inhalation LC50 1 h > 44 MG/L rat

<u>Product Animal Toxicity</u> <u>Oral LD50 value:</u> <u>Dermal LD50 value:</u> Inhalation LC50 value:	/ LD50 > 5,000 mg/kg Rat LD50 > 2,000 mg/kg Rabbit Inhalation LC50 1 h > 44 MG/L Rat	
Skin Irritation:	Not expected to be irritating to the skin.	
Eye Irritation: Acute Toxicity:	This material is expected to be non-irritating. There are no known or reported target organ effects from acute exposure.	
Subchronic / Chronic Toxicity:	Not known or reported to cause subchronic or chronic toxicity.	
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.	
Dimethicone	This chemical 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.	
Dimethicone	This chemical has been shown to be non-mutagenic based on a battery of assays.	
Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference	
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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.

Dimethicone

The carcinogenicity 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 NOT REGULATED AS A HAZARDOUS MATERIAL,

Flash Point: Not applicable

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Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL, Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Col EPA Pesticide Registr		The components of this product are listed on the TSCA Inventory of Existing Chemical Substances. None established	
FIFRA Listing of Pesti (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 Physical	Non Non	-	
Emergency Planning & Community Right to Know (40 CFR 355, App. A):			
Extremely Hazardous Substance Section 302 - Threshold Planning Quantity: ZUS_SAR302 TPQ (threshold planning None established quantity)			

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLAReportable quantityNone establishedZUS_SAR302Reportable quantityNone 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_CAAHAPNone established



ZUS CAAHRP	None established
200_0/0/110	

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:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :	
SECTIONS REVISED:	1
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.