

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

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS 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 1" CHLORINATING TABLETS** EPA Registration Number: 1258-1278

### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Arch Chemicals, Inc. 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 REVISION DATE: SUPERCEDES: 10/22/2015 05/26/2015

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA: 00000025303 none Chloroisocyanurates Swimming pool water treatment NOT APPLICABLE/MIXTURE

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification		
Oxidizing solids	:	Category 2
Acute toxicity (Oral)	:	Category 4
Skin corrosion	:	Category 1B
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3
GHS Label element		
Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H272 May intensify fire; oxidizer.
HTH 1" CHLORINATING TABLETS		



Precautionary statements

Arch

Inc.

Chemicals,

H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. **Prevention:** : P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep/Store away from clothing/ combustible materials. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe vapours. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response:** P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomitina. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician. P321 Specific treatment (see supplemental first aid instructions on this label). P330 Rinse mouth. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. Disposal: P501 Dispose of contents/container in accordance with local regulation.

#### Other hazards

None known.



### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS OR CHEMICAL NAME	<u>CAS #</u>	<u>% RANGE</u>
TRICHLORO-S-TRIAZINETRIONE	87-90-1	88 - 98
ALUMINUM SULFATE, ANHYDROUS	10043-01-3	1 - 11

### **SECTION 4. FIRST AID MEASURES**

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Ingestion:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Notes to Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

### **SECTION 5. FIREFIGHTING MEASURES**

Flammability Summary (OSHA):	Product is not known to be flammable, combustible or pyrophoric., NFPA Oxidizer Class: Meets the criteria of an NFPA Class 1 Oxidizer
Flammable Properties Flash Point: Autoignition Temperature:	Not applicable Not applicable

Are Che Inc	emicals,	SAFETY DATA SHEET
Fire / Explosion Hazards:	During a fire, irritating and highly thermal decomposition or combuse explode (due to the build up of steepstreme heat.	stion. Closed containers may
Extinguishing Media:	Water only.	
Fire Fighting Instructions:		, use heavy deluge or fog streams. e required before extinguishment
Upper Flammable / Explosive Limit, % in air:	Not applicable	
Lower Flammable / Explosive Limit, % in air:	Not applicable	

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Response to a large quantity spill (100 pounds or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air repirator or self contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment.Compatible materials for response to this material are: neoprene.Protection concerns must also address the following: If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.
Spill Mitigation Procedures	
Air Release:	Vapors may be suppressed by the use of water fog.
Water Release:	This material is heavier than water. This material is soluble in water. Stop water flow or divert water flow around spill if possible and safe to do so. Begin monitoring for available chlorine and pH immediately.
Land Release:	Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container.
Additional Spill Information :	FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1- 800-424-9300 REPORTABLE QUANTITY: Not Applicable (Per 40 CFR 302.4) Hazardous concentrations in air may be found in local spill area and immediately downwind. If spill material is still dry, do not put water directly on this product as a gas evolution may occur. If material is wet, contact 1-800-654-6911 for proper stabilization procedures. Dispose of spill residues per guidelines under Section 13, Disposal Consideration. This material may be neutralized for disposal; you are requested to contact Arch Chemicals at 1-800- 654-6911 before beginning any such procedure.



## **SECTION 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 dust, mist, vapor or gas.
Storage:	Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Avoid creating dusts.
Shelf Life Limitations:	Indefinite. Available chlorine loss can be as little as 0.1% per year at ambient temperatures.
Incompatible Materials for Storage:	Organic materials, Reducing agents, nitrogen containing materials, Oxidizing, Acids, Bases, (Incompatible materials for packaging: paper, cardboard)
Do Not Store At temperatures Above:	60 °C

### **SECTION 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 Ro	utine Use of Product

Respiratory Protection :	Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Respirator Type :	A NIOSH approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.
Skin Protection :	Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body.
Eye Protection:	Use chemical goggles.
Protective Clothing Type:	Nitrile, Natural Rubber, Neoprene (This includes: gloves, boots, apron, protective suit)
General Protective Measures:	An eye wash and safety shower should be provided in the immediate work area.

#### Components with workplace control parameters

no data available

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	solid
Form	tablet
Color:	white
Odor:	Sharp, chlorine-like, bleach odor



Molecular Weight: pH : Boiling Point: Melting point/freezing	Not applicable/Mixture 2.4 - 2.7 1% solution Not applicable Not applicable
point	
Density:	2.1000
	g/cc
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Viscosity:	Not applicable
Fat Solubility:	no data available
Solubility in Water:	1.20000 % (@ 25 Deg. C)
Partition coefficient n- octanol/water:	no data available
Evaporation Rate:	Not applicable
Oxidizing:	Oxidizing
Volatiles, % by vol.:	Not applicable
VOC Content	Not applicable
HAP Content	Not applicable

### **SECTION 10. STABILITY AND REACTIVITY**

Stability and Reactivity Summary:	May be unstable at temperatures above 225 Deg. C (437 Deg. F) Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization. Considered to be an OSHA oxidizer per 29 CFR 1910.1200. Not an oxidizer according to the criteria established by the 49 CFR DOT regulations. NFPA Oxidizer Class: Meets the criteria of an NFPA Class 1 Oxidizer
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes., Damp or slightly wet product (will evolve nitrogen trichloride), May be unstable at temperatures above 225 Deg. C (437 Deg. F)
Chemical Incompatibility:	Organic materials, Oils, Grease, Sawdust, nitrogen-containing compounds, Oxidizing, Acids, Bases, Dry fire extinguishers containing ammonium compounds
Hazardous Decomposition Products:	Nitrogen trichloride, Chlorine, nitrous oxides, cyanates, Carbon monoxide, Carbon dioxide
Decomposition Temperature:	225 °C - , 437 °F-

### **SECTION 11. TOXICOLOGICAL INFORMATION**

Component Animal Toxicology<br/>Oral LD50 value:TRICHLORO-S-LD50= 490 mg/kgRatTRIAZINETRIONEALUMINUM SULFATE,LD50= 1,930 mg/kgRatHTH 1" CHLORINATING TABLETS<br/>REVISION DATE :10/22/2015Page 6 of 11



### ANHYDROUS

ANHYDROUS	LD50 = 6,207 mg/ł	kg Mouse	
Component Animal Tox Dermal LD50 value:	<u>kicology</u>		
TRICHLORO-S- TRIAZINETRIONE	LD50 > 2,000 mg/l	kg Rabbit	
ALUMINUM SULFATE ANHYDROUS	, LD50 no data availal	ble	
Component Animal Tox	<u>kicology</u>		
Inhalation LC50 value: TRICHLORO-S- TRIAZINETRIONE	LC50 4 h (aerosol d	ust), (Nose Only) approximately	0.54 mg/l Rat
	LC50 1 h (aerosol d	ust), (Nose Only) approximately	2.16 mg/I Rat
ALUMINUM SULFATE ANHYDROUS	, Inhalation LC50 no	data available	
Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value:	/ LD50 Believed to be > LD50 > 5,000 mg/kg no data available		
Skin Irritation:	DRY MATERIAL CAUS CAUSES SKIN BURNS	SES MODERATE SKIN IRRITATIO	N., WET MATERIAL
Eye Irritation: Skin Sensitization:	Corrosive to eyes.	r, guinea pig - Buehler Method	
Acute Toxicity: Subchronic / Chronic Toxicity:	irritation to mucous mer the skin. However wher There are no known or	e to all tissues contacted and upon mbranes and respiratory tract. The on wet, it will produce burns to the sk reported effects from repeated exp t does not produce significant effect	dry material is irritating to kin. osure., Toxicological
Reproductive and Developmental Toxicity	Not known or repo	orted to cause reproductive or deve	lopmental toxicity.
	S-TRIAZINETRIONE	Not known or reported to cause a developmental toxicity. A similar tested and it did not produce tera effects in laboratory animals.	product has been
Mutagenicity:		orted to be mutagenic.	
TRICHLORO	-S-TRIAZINETRIONE	This product was determined to I the Ames assay.	be non-mutagenic in
Carcinogenicity:	This product is not	t known or reported to be carcinoge	enic by any reference
HTH 1" CHLORINATING	TABLETS		



source including IARC, OSHA, NTP or EPA.

TRICHLORO-S-TRIAZINETRIONE

This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

### **SECTION 12. ECOLOGICAL INFORMATION**

Overview:

Highly toxic to fish and other aquatic organisms.

Ecological Toxicity Values - Product:		
Rainbow trout (Salmo gairdneri),	-	96 h LC50 0.32 mg/l
Bluegill sunfish	-	96 h LC50 0.30 mg/l
Daphnia magna,	-	48 h LC50 0.21 mg/l
Mallard duck	-	8 d Dietary LC50 > 10,000 ppm
Mallard duck	-	Acute Oral LD50 1,600 mg/kg
Bobwhite quail	-	8 d Dietary LC50 7,422 ppm

#### Ecological Toxicity Values for: TRICHLORO-S-TRIAZINETRIONE

Rainbow trout (Salmo gairdneri),	-	96 h LC50 0.32 mg/l
Bluegill sunfish	-	96 h LC50 0.30 mg/l
Daphnia magna,	-	48 h LC50 0.21 mg/l
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Mallard duck	-	Acute Oral LD50 1,600 mg/kg
Bobwhite quail	-	8 d Dietary LC50 7,422 ppm

#### Ecological Toxicity Values for: ALUMINUM SULFATE, ANHYDROUS

-	Largemouth bass	-	96 h LC50 = 250 mg/l
Mosquito fish		-	96 h LC50 = 235 mg/l

### **SECTION 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

### **SECTION 14. TRANSPORT INFORMATION**

DOT UN number Description of the goods Class Packing group Labels Emergency Response Guidebook Number	: : : : : : : : : : : : : : : : : : : :	3077 Environmentally hazardous substances, solid, n.o.s. (Trichloro-s-triazinetrione) 9 III 9 171
<b>TDG</b> UN number Description of the goods	:	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trichloro-s-triazinetrione)
Class	:	9
Packing group	:	
Labels	:	9
ΙΑΤΑ		
UN number	:	3077
Description of the goods	:	Environmentally hazardous substance, solid, n.o.s.
		(Trichloro-s-triazinetrione)
Class	:	9
Packing group	:	
Labels Packing instruction (cargo	:	9MI 956
aircraft)	•	930
Packing instruction	:	956
(passenger aircraft)		
Packing instruction	:	Y956
(passenger aircraft)		
IMDG-CODE		
UN number	:	3077
Description of the goods	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
_		N.O.S.
		(Trichloro-s-triazinetrione)
Class	:	9
Packing group	:	111



Labels	:	9
EmS Number 1	:	F-A
EmS Number 2	:	S-F
Marine pollutant	:	yes

### SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

- 5	<ul> <li>DANGER!</li> <li>Harmful if swallowed. May be fatal if absorbed through skin. May be fatal if inhaled. Corrosive. Causes skin burns. Corrosive. Causes irreversible eye damage. This pesticide is toxic to fish.</li> </ul>
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#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Aluminium sulphate	10043-01-3	5000	80645

#### **SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **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.

#### **US State Regulations**

Massachusetts Right To Know		
	trichloroisocyanuric acid Aluminium sulphate	87-90-1 10043-01-3
Pennsylvania Right To Know		
	trichloroisocyanuric acid Aluminium sulphate	87-90-1 10043-01-3
New Jareau Dight Ta Know		

#### New Jersey Right To Know



trichloroisocyanuric acid Aluminium sulphate 87-90-1 10043-01-3

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:

Arch

Inc.

Chemicals,

TSCA

: This is an EPA registered pesticide.

#### Inventories

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

### **SECTION 16. OTHER INFORMATION**

SECTIONS REVISED:	
Major References :	

1 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.