HTH Super 3" Chlorinating Tablets Version 1.0 SDS Number: 00000025218

Revision Date: 2018.03.28

SECTION 1. IDENTIFICATION

Product name	:	HTH Super 3" Chlorinating Tablets
Product code	:	00000025218
Manufacturer or supplier's details	5	
Company	:	Arch Chemicals, Inc. 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America (USA)
E-mail address Emergency telephone number	:	sds@lonza.com In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD-WIDE: +1-703-527-3887.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Acute toxicity (Oral)	: Category 4
Skin corrosion/irritation	: Category 2
Serious eye damage	: Category 1
Specific target organ toxicity - single exposure	: Category 3 (Respiratory system)
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	 H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Precautionary statements	 Prevention: 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/doctor if you feel unwell. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT
ef. / 00000025218	Page 1 (12)

Version 1.0	SDS Number: 000000025218	Revision Date: 2018.03.28
	induce vomiting.	
	P302 + P352 IF ON SKIN: Wa	sh with plenty of water.
	P332 + P313 If skin irritation of	ccurs: Get medical advice/ attention.
	P305 + P351 + P338 IF IN EY	ES: Rinse cautiously with water for
	several minutes. Remove cont	act lenses, if present and easy to
	do. Continue rinsing.	
	P310 Immediately call a POIS	ON CENTER/doctor.
	P304 + P340 IF INHALED: Re comfortable for breathing.	move person to fresh air and keep
	P321 Specific treatment (see s	supplemental first aid instructions on

this label). P362 Take off contaminated clothing and wash before reuse. **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

Chemical nature

: Chloroisocyanurates

Hazardous components

Chemical name	CAS-No.	Concentration (%)
1,3,5-Trichloro-1,3,5-triazinane-2,4,6-trione	87-90-1	93.60
zinc sulphate	7446-19-7	3.50
filter aid		1.50

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 Emergen- cy 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.
If inhaled	: 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.
In case of 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.
In case of 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.





sion 1.0	DS Numbe	r: 00000025218 Revision Date: 2018.03.24
If swallowed	ately to sy cont	WALLOWED: Call a poison control center or doctor immedi- y for treatment advice. Have person sip a glass of water if able wallow. Do not induce vomiting unless told to do so by a poiso rol center or doctor. Do not give anything by mouth to an un- scious person.
Notes to physician	: Prot lava	bable mucosal damage may contraindicate the use of gastric ge.
TION 5. FIREFIGHTING MEASU	RES	
Suitable extinguishing media	: Wat	er only.
Specific hazards during firefightir	ther Clos	ng a fire, irritating and highly toxic gases may be generated b mal decomposition or combustion. sed containers may explode (due to the build up of steam pre e) when exposed to extreme heat.
Further information	wate strea tingu	water to cool containers exposed to fire. On small fires, use er spray or fog. On large fires, use heavy deluge or fog ams. Flooding amounts of water may be required before ex- uishment can be accomplished.

Do not use dry extinguishers containing ammonium compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency proce- dures	:	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 equip- ment. Compatible materials for response to this material are: neoprene. Protection concerns must also address the following: If this materi- al becomes damp/wet or contaminated in a container, the for- mation of nitrogen trichloride gas may occur and an explosive con- dition may exist.
Environmental precautions		
Air Water	:	Vapors may be suppressed by the use of water fog. 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.
Soil	:	Begin monitoring for available chlorine and pH immediately. Do not contaminate spill material with any organic materials, am- monia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container.

HTH Super 3" Chlorinating Tablets

Version 1.0	SDS Number: 000000025218	Revision Date: 2018.03.28
Advice on safe handling	: Do not take internally. Avoid co Upon contact with skin or eyes Avoid breathing dust, mist, vap	
Conditions for safe storage		ocation, away from sources of igni- litions and chemicals. Keep contain-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissi- ble concentra- tion	Basis
filter aid	Not Assigned	(Respirable fraction.)		ACGIH
		TWA (Res- pirable frac- tion.)	1 mg/m3	ACGIH
		REL	2 mg/m3 (as Al)	NIOSH/GUIDE
		TWA	2 mg/m3 (as Al)	Z1A
		TWA (Res- pirable frac- tion.)	1 mg/m3	CAD ON OEL

Appropriate engineering controls

Engineering measures	:	Local exhaust ventilation or other engineering controls are nor- mally required when handling or using this product to keep air- borne exposures below the TLV, PEL or other recommended exposure limit.
Personal protective equipment Respiratory protection	:	Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Hand protection		
Remarks	:	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.
Skin and body protection	:	Nitrile Natural Rubber Neoprene (This includes: gloves, boots, apron, protective suit)
Protective measures	:	An eye wash and safety shower should be provided in the imme- diate work area.

Version 1.0

SDS Numb<u>er: 000000025218</u>

Revision Date: 2018.03.28

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	tablet
Colour	:	white
Odour	:	Sharp, chlorine-like, bleach odor
Odour Threshold	:	no data available
pH	:	2.6, 1 %
Melting point/freezing point	:	Not applicable
Boiling point/boiling range	:	no data available
Flash point	:	no data available
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Product is not known to be flammable, combustible or pyrophoric.
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	no data available
Relative density	:	> 1 (20 °C)
Solubility(ies) Water solubility	:	12 g/l (25 °C)
Partition coefficient: n- octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	225 °C
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Oxidizing properties	:	Oxidizing
Molecular weight	:	232.41 g/mol

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Product will not undergo hazardous polymerization. Product is an

Lonza

HTH Super 3" Chlorinating Tablets

sion 1.0	SDS Number: 000000025218	Revision Date: 2018.03.28
Conditions to avoid	tures. Contact with small amounts of reaction with the liberation of to Damp or slightly wet product (
Incompatible materials	: Organic materials Oils Grease Sawdust Reducing agents nitrogen-containing compound Oxidizing Acids Bases Dry fire extinguishers containir	
Hazardous decomposition products	 Nitrogen trichloride Chlorine nitrous oxides cyanates Carbon monoxide, Carbon dio 	oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation, skin, eyes, ingestion
Acute toxicity		
Acute oral toxicity (LD50)	:	490 mg/kg Species: Rat
Acute inhalation toxicity (LC50)	:	approximately 0.54 mg/l Species: Rat Exposure time: 4 h Test atmosphere: dust/mistRemarks: (Nose Only)
Acute inhalation toxicity (LC50)	:	approximately 2.16 mg/l Species: Rat Exposure time: 1 h Test atmosphere: dust/mistRemarks: (Nose Only)
Acute dermal toxicity (LD50)	:	> 2,000 mg/kg Species: Rabbit
Skin corrosion/irritation Skin irritation	:	Remarks: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION.WET MATERIAL CAUSES SKIN BURNS.
Serious eye damage/eye irritation Eye irritation	:	Remarks: Corrosive to eyes

ersion 1.0	SDS Number: 000000025218	Revision Date: 2018.03.
Respiratory or skin sensit	tisation	
Sensitisation	: Remarks: Negative skin sensiti	zer, guinea pig - Buehler Method
Carcinogenicity		
IARC		present at levels greater than or probable, possible or confirmed
OSHA	No component of this product equal to 0.1% is on OSHA's list	present at levels greater than or st of regulated carcinogens.
NTP		present at levels greater than or a known or anticipated carcinoge
Repeated dose toxicity		
	exposure.	or reported effects from repeated cates it does not produce signifi- sure.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity		
Toxicity to fish (LC50)	:	0.32 mg/l Species: Rainbow trout (Salmo gairdneri), Exposure time: 96 h
Toxicity to fish (LC50)		0.30 mg/l Species: Bluegill sunfish Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates (LC50)	:	0.21 mg/l Species: Daphnia magna, Exposure time: 48 h
Toxicity to terrestrial organisms	:	Dietary LC50(Anas platyrhynchos (Mallard duck)): > 10,000 ppm Exposure time: 8 d
		Acute Oral LD50(Anas platyrhynchos (Mallard duck)): 1,600 mg/kg
		Dietary LC50(Colinus virginianus (Bobwhite quail)): 7,422 ppm Exposure time: 8 d
Persistence and degradability		
no data available Bioaccumulative potential		
Components:		

1,3,5-Trichloro-1,3,5-triazinane-2,4,6-trione

HTH Super 3" Chlorinating Tablets

/ersion 1.0	SDS Number: 000000025218	Revision Date: 2018.03.28	
Partition coefficient: n- octanol/water	: log Pow: 0.94 Method: Calculation method		
Mobility in soil			
no data available			
Other adverse effects			
Ozone-Depletion Potential	 Regulation: US. EPA Clean Air A Depleting Substances (40 CFR & Remarks: This product neither c with a Class I or Class II ODS as Section 602 (40 CFR 82, Subpt. 	82, Subpt. A, App A & B) ontains, nor was manufactured s defined by the U.S. Clean Air Act	
Additional ecological informatio	n : Highly toxic to fish and other aqu	uatic 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

ΙΑΤΑ

IMDG

UN number Proper shipping name Transport hazard class Packing group Labels Environmental hazards	 3077 Environmentally hazardous substance, solid, n.o.s. (Trichloro-s-triazinetrione, zinc sulphate) 9 III 9MI yes
UN number Proper shipping name Transport hazard class Packing group Labels EmS Number 1	 3077 Environmentally hazardous substance, solid, n.o.s. (Trichloro-s-triazinetrione, zinc sulphate) 9 III 9 F-A

Labels EmS Number 1 EmS Number 2 Environmental hazards

HTH Super 3" Chlorinating Tablets
Version 1.0 SDS Number: 00000025218

Revision Date: 2018.03.28

ADR

RID

DOT

UN number Proper shipping name Transport hazard class Packing group Classification Code Hazard Identification Number Labels Environmental hazards	 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trichloro-s-triazinetrione, zinc sulphate) 9 III M7 90 9 yes
UN number Proper shipping name Transport hazard class Packing group Classification Code Hazard Identification Number Labels Environmental hazards	 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trichloro-s-triazinetrione, zinc sulphate) 9 III M7 90 9 yes
UN number Proper shipping name Transport hazard class Packing group Labels Emergency Response Guidebook Number Environmental hazards	 3077 Environmentally hazardous substance, solid, n.o.s. (Trichloro-s-triazinetrione, zinc sulphate) 9 III 9 171 yes

Lonza

Version 1.0 SDS Number: 00000025218

Page 10 (12)

TDG

UN number Proper shipping name	-	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trichloro-s-triazinetrione, zinc sulphate)
Transport hazard class Packing group Labels Environmental hazards	:	9 III 9 yes

Special precautions for user

49CFR (DOT) Material is not regulated for ground transportation within the US if shipped in non-bulk packages. Material is not regulated as a marine pollutant for ground transportation within the US if shipped in non-bulk packages (reference 49CFR 171.4(c)).

Transport in bulk according to An-	:	Not applicable
nex II of MARPOL 73/78 and the IBC		
Code		

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.

Signal word Hazard statements	:	
EPA No.	:	1258-1338

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
zinc sulphate	7446-19-7	1000	28571

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 302

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

SARA 313

Revision Date: 2018.03.28

HTH Super 3" Chlorinating Tablets

Version 1.0

SDS Number: 000000025218

Revision Date: 2018.03.28

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components	CAS-No.	Component RQ (lbs)
zinc sulphate	7446-19-7	1000
filter aid	17927-65-0	5000

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components	CAS-No.	Concentration
zinc sulphate	7446-19-7	
filter aid	17927-65-0	

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Components	CAS-No.
1,3,5-Trichloro-1,3,5-triazinane-2,4,6-trione	87-90-1
zinc sulphate	7446-19-7
filter aid	

Pennsylvania Right To Know

Components	CAS-No.
1,3,5-Trichloro-1,3,5-triazinane-2,4,6-trione	87-90-1
zinc sulphate	7446-19-7
filter aid	

New Jersey Right To Know

Components	CAS-No.
•	



Version 1.0	SDS Number: 00000025218	Revision Date: 2018.03.28

1,3,5-Trichloro-1,3,5-triazinane-2,4,6-trione	87-90-1
zinc sulphate	7446-19-7
filter aid	

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.

SECTION 16. OTHER INFORMATION

1

Arch is a wholly-owned subsidiary of Lonza and continues to operate as Arch Chemicals, Inc. Revision Date : 2018.03.28

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.