

Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

SECTION 1. IDENTIFICATION

Product name : HTH EXTRA SUPER SHOCK

Product code : 000000023087

Manufacturer or supplier's details

Company : Arch Chemicals, Inc.

1200 Bluegrass Lakes Parkway

Alpharetta, GA

30004

United States of America (USA)

E-mail address : sds@lonza.com

Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,

CHEMTREC WORLD-WIDE: +1-703-527-3887.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Oxidizing solids : Category 2

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 2

Skin 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 : H272 May intensify fire; oxidizer.

H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**

P210 Keep away from heat.

P220 Keep/Store away from clothing/ combustible materials. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Ref. /00000023087 Page 1 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

P264 Wash skin 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/ eye protection/ face protection.

P284 Wear respiratory protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P332 + P313 If skin irritation occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use water spray 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 to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Hypochlorite

Hazardous components

| Chemical name | CAS-No. | Concentration (%) |
|----------------------|------------|-------------------|
| Calcium hypochlorite | 7778-54-3 | 65.00 - 90.00 |
| Sodium chloride | 7647-14-5 | 0.00 - 3.00 |
| Calcium chlorate | 10137-74-3 | 0.00 - 5.00 |
| Calcium chloride | 10043-52-4 | 0.00 - 5.00 |
| Calcium dihydroxide | 1305-62-0 | 0.00 - 5.00 |
| Calcium carbonate | 471-34-1 | 0.00 - 4.00 |
| Water | 7732-18-5 | 9.00 - 16.00 |

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.

If inhaled : IF INHALED: Move person to fresh air. If person is not breathing,

call 911 or an ambulance, then give artificial respiration, preferably

Ref. /00000023087 Page 2 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

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.

If swallowed : IF SWALLOWED: Call a poison control center or doctor immedi-

ately 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 un-

conscious person.

Notes to physician : Probable mucosal damage may contraindicate the use of gastric

lavage.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water only.

Do not use dry extinguishers containing ammonium compounds.

Specific hazards during firefighting : Strong oxidizer

Further information : Use water to cool containers exposed to fire. See Section 6 for

protective equipment for fire fighting.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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.

Environmental precautions

Air : Vapors may be suppressed by the use of water fog.

All water utilized to assist in fume suppression, decontamination or fire suppression may be contaminated and must be contained

before disposal and/or treatment.

Water : This product is heavier than water.

This material is soluble in water.

Monitor all exit water for available chlorine and pH. Advise local

authorities of any contaminated water release.

Soil : Contact 1-800-654-6911 immediately. DANGER: All spills of this

product should be treated as contaminated. Contaminated product

Ref. /00000023087 Page 3 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

may initiate a chemical reaction that may spontaneously ignite any combustible material present, resulting in a fire of great intensity. In case of a spill, separate all spilled product from packaging, debris and other material. Using a clean broom or shovel, place all spilled product into plastic bags, and place those bags into a clean, dry disposal container, properly marked and labeled. Disposal containers made of plastic or metal are recommended. Do not seal disposal containers tightly. Immediately remove all product in disposal containers to an isolated area outdoors. Place all damaged packaging material in a disposal container of water to assure decontamination (i.e. removal of all product) before disposal. Place all undamaged packaging in a clean, dry container properly marked and labeled. Call for disposal procedures.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid inhalation of dust and fumes.

Do not take internally. Avoid contact with skin, eyes and clothing.

Upon contact with skin or eyes, wash off with water. Remove contaminated clothing and wash before reuse.

Conditions for safe storage : Keep product tightly sealed in original containers. Store product in

a cool, dry, well-ventilated area. Store away from combustible or flammable products. Keep product packaging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers,

all corrosive liquids, flammable or combustible materials, etc.

Materials to avoid : Do not allow product to come in contact with other materials, in-

cluding e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc. A chemical reaction with such substances can cause a fire of great intensity.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentra- | Basis |
|---------------------|-----------|-------------------------------------|---|-------------|
| | | , , , , , | tion | |
| Calcium dihydroxide | 1305-62-0 | TWA | 5 mg/m3 | ACGIH |
| | | REL | 5 mg/m3 | NIOSH/GUIDE |
| | | PEL (Total | 15 mg/m3 | OSHA_TRANS |
| | | dust.) | | |
| | | PEL (Respirable fraction.) | 5 mg/m3 | OSHA_TRANS |
| | | TWA | 5 mg/m3 | Z1A |
| | | TWA | 5 mg/m3 | CAD ON OEL |
| Calcium carbonate | 471-34-1 | REL (Total) | 10 mg/m3 | NIOSH/GUIDE |
| | | REL (Respir- | 5 mg/m3 | NIOSH/GUIDE |
| | | able.) | | |

Ref. /00000023087 Page 4 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

| PEL (Total | 15 mg/m3 | OSHA_TRANS |
|-----------------|----------|------------|
| dust.) | | |
| PEL (Respir- | 5 mg/m3 | OSHA_TRANS |
| able fraction.) | | |
| TWA (Total | 15 mg/m3 | Z1A |
| dust.) | | |
| TWA (Res- | 5 mg/m3 | Z1A |
| pirable frac- | | |
| tion.) | | |

Appropriate engineering controls

Engineering measures : Local exhaust ventilation or other engineering controls are nor-

mally required when handling or using this product to keep airborne 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 : Neoprene, Nitrile, Natural rubber (This includes: gloves, boots,

apron, protective suit)

Protective measures : An eye wash and safety shower should be provided in the imme-

diate work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : free flowing, granular

Colour : white

Odour : Chlorine-like

Odour Threshold : no data available

pH : 10.5 - 11.5, 1 % (25 °C)

Melting point/range : Not applicable

Boiling point/boiling range : no data available

Flash point : no data available

Evaporation rate : Not applicable

Flammability (solid, gas) : This product is chemically reactive with many substances. Any

Ref. /00000023087 Page 5 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

contamination of the product with other substances by spill or otherwise may result in a chemical reaction and fire.

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable

Relative vapour density : no data available

Relative density : Not applicable

Solubility(ies)

Water solubility : ca. 180 g/l (25 °C)

Partition coefficient: n-

octanol/water

no data available

Auto-ignition temperature : no data available

Decomposition temperature : 170 - 180 °C

Viscosity, dynamic : no data available

Viscosity, kinematic : no data available

Oxidizing properties : Oxidizing

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Product is not sensitive to mechanical shock or impact. Product is

not sensitive to electrical static discharge. Product will not undergo hazardous polymerization. Product is an NFPA Class 3 oxidizer which can cause a severe increase in fire intensity. Not pyrophoric. Not an organic peroxide. If subjected to excessive temperatures, the product may undergo rapid decomposition, evolution of chlorine gas, and heat sufficient to ignite combustible substances. If product is exposed to small amounts of water, it can react violently

to produce heat and toxic gases and spatter. Use copious amounts of water for fires involving this product.

Conditions to avoid : Do not store next to heat source, in direct sunlight, or elevated

storage temperature. Do not store where the daily average temperature exceeds 95 $^{\circ}$ F. Prevent ingress of humidity and moisture

into container or package. Always close the lid.

Incompatible materials : This product is chemically reactive with many substances, includ-

ing, e.g., other pool treatment products, acids, organics, nitrogencontaining compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive ,flammable or combustible materials. Do not allow product to contact any foreign matter, including other water treatment products. Contamination or improper use may cause a fire of great intensity, explosion or the release of toxic gases. If product is exposed to small amounts

Ref. /00000023087 Page 6 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

of water, it can react violently to produce heat and toxic gases and

spatter.

Hazardous decomposition prod-

ucts

Chlorine

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of

exposure

Inhalation, skin, eyes, ingestion

Acute toxicity

Acute oral toxicity (LD50)

Believed to be approximately 700 mg/kg

Species: Rat

Acute dermal toxicity (LD50)

Believed to be > 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

Assessment: Corrosive Remarks: Corrosive to eyes

Respiratory or skin sensitisation

Sensitisation

Remarks: This material is not known or reported to be a skin or

respiratory sensitizer.

Carcinogenicity

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Further information

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Ref. /00000023087 Page 7 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

Persistence and degradability

no data available

Bioaccumulative potential

Components:

Sodium chloride

Partition coefficient: n-

octanol/water

log Pow: -3

Mobility in soil

no data available

Other adverse effects

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-

Depleting Substances (40 CFR 82, Subpt. A, App A & B) Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Highly toxic to fish and other aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If this product becomes a waste, it meets the criteria of a hazard-

ous waste as defined under 40 CFR 261 and would have the fol-

lowing EPA hazardous waste number: D001.

If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal restrictions under 40 CFR

268 and must be managed accordingly.

Ref. /00000023087 Page 8 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

SECTION 14. TRANSPORT INFORMATION

IATA

UN number : 2880

Proper shipping name : Calcium hypochlorite, hydrated mixture

Transport hazard class : 5.1
Packing group : II
Labels : 5.1
Environmental hazards : no

IMDG

UN number : 2880

Proper shipping name : Calcium hypochlorite, hydrated mixture

Transport hazard class : 5.1
Packing group : II
Labels : 5.1
EmS Number 1 : F-H
EmS Number 2 : S-Q

Environmental hazards : Marine pollutant: yes

ADR

UN number : 2880

Proper shipping name : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

Transport hazard class : 5.1
Packing group : II
Classification Code : O2
Hazard Identification Number : 50
Labels : 5.1
Environmental hazards : yes

RID

UN number : 2880

Proper shipping name : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

Transport hazard class : 5.1
Packing group : II
Classification Code : O2
Hazard Identification Number : 50
Labels : 5.1
Environmental hazards : yes

DOT

UN number : 2880

Proper shipping name : Calcium hypochlorite, hydrated mixtures

Transport hazard class: 5.1Packing group: IILabels: 5.1Emergency Response Guidebook: 140

Emergency Response Guidebo

Number

Environmental hazards : yes

Ref. /00000023087 Page 9 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

TDG

UN number : 2880

Proper shipping name : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

Transport hazard class : 5.1
Packing group : II
Labels : 5.1
Environmental hazards : yes

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

Code

: Not applicable

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ |
|----------------------|-----------|--------------------|-----------------------|
| | | | (lbs) |
| Calcium hypochlorite | 7778-54-3 | 10 | 11 |

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

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

Ref. /00000023087 Page 10 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

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

| Components | CAS-No. | Component RQ (lbs) |
|----------------------|-----------|-----------------------|
| Calcium hypochlorite | 7778-54-3 | 10 |

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

| Components | CAS-No. | Concentration |
|----------------------|-----------|---------------|
| Calcium hypochlorite | 7778-54-3 | |

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. |
|----------------------|------------|
| Calcium hypochlorite | 7778-54-3 |
| Calcium chlorate | 10137-74-3 |
| Calcium dihydroxide | 1305-62-0 |
| Calcium carbonate | 471-34-1 |

Pennsylvania Right To Know

| Components | CAS-No. |
|----------------------|------------|
| Calcium hypochlorite | 7778-54-3 |
| Calcium chlorate | 10137-74-3 |
| Calcium chloride | 10043-52-4 |
| Calcium dihydroxide | 1305-62-0 |
| Calcium carbonate | 471-34-1 |
| Sodium chloride | 7647-14-5 |

New Jersey Right To Know

| Components | CAS-No. |
|----------------------|------------|
| Calcium hypochlorite | 7778-54-3 |
| Calcium chlorate | 10137-74-3 |
| Calcium chloride | 10043-52-4 |
| Calcium dihydroxide | 1305-62-0 |
| Calcium carbonate | 471-34-1 |

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

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

Revision Date : 2017.12.12

Ref. /00000023087 Page 11 (12)



Version 1.0 SDS Number: 000000023087 Revision Date: 2017.12.12

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.

Ref. /00000023087 Page 12 (12)