POOL PURE SHOCK

SECTION 1. IDENTIFICATION

Product Identifier	POOL PURE SHOCK
Other Means of Identification	23003RAW
Recommended Use	Controls bacteria and algae in swimming pool waters.
Manufacturer	Lawrason's, Inc, 460 Wyecroft Road, Oakville, Ontario, L6K 2G7, (905) 842-8300, www.Lawrasons.com
Supplier Identifier	POOL AND SPA CHEMICAL COMPANY, 460 Wyecroft Road, Oakville, Ontario, L6K 2G7, Canada, (905) 842-8300, www.pool-pure.com
Emergency Phone No.	CANUTEC, 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone
SDS No.	23001P20PP
Date of Preparation	February 01, 2018

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Oxidizing solid - Category 2; Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 3; Skin corrosion - Category 1B; Serious eye damage - Category 1; Specific target organ toxicity (single exposure) - Category 3

Label Elements

Danger

Hazard Statement(s):
May intensify fire; oxidizer.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Toxic if inhaled.
May cause respiratory irritation.

Precautionary Statement(s):
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep/Store away from clothing//combustible materials.
Take any precaution to avoid mixing with combustibles.
Do not breathe dusts or mists.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Response:
If SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 CENTRE or doctor.
Wash contaminated clothing before reuse.
In case of fire: Use water spray or fog, appropriate foam, dry chemical powder, carbon dioxide to extinguish.

Storage:
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Disposal:
Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Calcium Hypochlorite	7778-54-3	80.00-100		
Sodium chloride	7647-14-5	10.00-30.00		
Water	7732-18-5	5.00-10.00		
Calcium chloride	10043-52-4	1.00-5.00		
Calcium hydroxide	1305-62-0	1.00-5.00		
Calcium carbonate	471-34-1	1.00-5.00		
Calcium chlorate	10137-74-3	1.00-5.00		

Notes

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

In case of oxygen deficiency: move to fresh air. Keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor. Specific treatment is required.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Immediately call a Poison Centre or doctor.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Immediately call a Poison Centre or doctor. Specific treatment is required.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor. Specific treatment is required.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

DO NOT use dry chemical fire extinguishing agents containing ammonium compounds (such as some A:B:C agents).

Specific Hazards Arising from the Product

Strong oxidizer.

Special Protective Equipment and Precautions for Fire-fighters

Oxidizer. Prevent contact with flammable and combustible materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Conditions for Safe Storage

Store in an area that is: cool, ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in the original, labelled, shipping container. Protect product from contact with water, including humidity. Prevent rainwater and ground water from reaching storage area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Calcium Hypochlorite	1 mg/m3	Not established	Not established	Not established	Not established	37 mg/m3
Sodium chloride	Not established		Not established		Not established	
Water	Not established		Not established			
Calcium chloride	Not established		15 mg/m3		Not established	
Calcium hydroxide	Not established		5 mg/m3		Not established	

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Ensure that eye stations and safety showers are

proximal to the work-station location.
Suitable materials are: neoprene rubber, nitrile rubber, natural rubber.

Respiratory Protection

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	White Granular.
Odour	Chlorine
pH	10.4 - 10.8
Melting Point/Freezing Point	Not applicable (melting); Not applicable (freezing)
Initial Boiling Point/Range	Not applicable
Evaporation Rate	Not applicable
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	Not applicable
Solubility	Soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Viscosity	Not applicable (kinematic); Not applicable (dynamic)

Other Information

Physical State	Solid
Molecular Weight	143 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use. Not sensitive to mechanical impact. Oxidizer. May cause or intensify fire. Reacts vigorously with water to release a very toxic gas.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Prolonged exposure to high temperatures. Sunlight. Water, moisture or humidity.

Incompatible Materials

Highly reactive. Acid anhydrides (e.g. acetic anhydride), amines (e.g. triethylamine), halogens (e.g. chlorine).

Hazardous Decomposition Products

Toxic chemicals; corrosive hydrogen chloride.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Calcium Hypochlorite	2.04 mg/L (rat) (1-hour exposure)	850 mg/kg (rat)	> 2000 mg/kg (rabbit)
Sodium chloride	> 21000 mg/m3 (rat)	3000 mg/kg (rat)	Not available
Water		> 89840 mg/kg (rat)	

Calcium chloride	Not available	1126 mg/kg	2637 mg/kg
Calcium hydroxide	Not available	7340 mg/kg (rat)	Not available

Skin Corrosion/Irritation

Human experience and animal tests show moderate or severe irritation. Repeated or prolonged exposure can irritate or burn the skin.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye damage. Causes serious eye damage based on skin corrosion information.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause severe nose and throat irritation, severe lung injury.

Skin Absorption

Causes skin burns.

Ingestion

Serious stomach damage may result.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Calcium Hypochlorite	Not designated	Not designated	Not designated	Not designated
Sodium chloride	Not Listed	Not Listed	Not Listed	Not Listed
Calcium chloride	Not evaluated	Not evaluated	Not evaluated	Not evaluated
Calcium hydroxide	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Germ Cell Mutagenicity

Not known to be a mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to fish, aquatic life.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. Store product for disposal as described under Storage in Section 7 of this safety data sheet. Do not reuse empty containers.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	2880	Calcium hypochlorite, hydrated mixtures	5.1	II
Canadian TDG	2880	Calcium hypochlorite, hydrated mixtures	5.1	II
IATA (Air)	2880	Calcium hypochlorite, hydrated mixtures	5.1	II

Environmental Hazards Marine Pollutant

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This section is not required by WHMIS.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 3 Flammability - 0 Instability - 1**
Special Hazard - Oxidizing

SDS Prepared By Technical Manager

Phone No. 905-842-8300

Date of Preparation February 01, 2018

Date of Last Revision June 01, 2018

Key to Abbreviations IARC = International Agency for Research on Cancer

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA (“BIOVIA”). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

Additional Information All information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations of mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product,personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product). To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Lawrason's, Inc. nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process.The user alone must finally determine suitability of any information or material for any contemplated use in compliance with

applicable law, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes. Lawrason's Inc. reserves the right to make additions, deletions or modifications to the information at any time without prior notification.

Disclaimer

While the company believes the data set forth herein are accurate as of the date hereof, the company makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.