Material Safety Data Sheet

WHMIS	TDG Road/Rail

Health Hazard	*	3
Fire Hazard		0
Reactivity		1
Personal Protection		E

This MSDS is providen as information only. The product is not WHIMS regulated. The product is regulated under the PCP act and packaged as a consumer product.

1. Product and company identification

Product name : **SHOCK N'CHLOR**

Code : 30-60220

Date of issue (dd/mm/yyyy) : **2012-10-16.**

Material uses : Consumer products: Pool and Spa Water treatment agent.

Supplier : Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

Manufacturer : Manufactured for:
Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

In case of emergency : **Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)**

2. Hazards identification

Potential hazards described in this section are not expected when manufacturer's direction for use and proper security measures are observed.

Physical state : Solid. [Powder. Leaflets. Pellets.]

Odor : Pungent. [Strong]

Emergency overview : **WARNING!**

Fine dust clouds may form explosive mixtures with air. May be harmful if absorbed through skin or if swallowed. Severely irritating to the eyes, skin and respiratory system. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Keep away from heat, sparks and flame. Prevent dust accumulation. Do not ingest. Do not get in eyes. Avoid breathing dust. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation : Severely irritating to the respiratory system.

Ingestion : Harmful if swallowed.

Skin : Harmful in contact with skin. Severely irritating to the skin.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

See toxicological information (Section 11) for more details.

3. Composition/information on ingredients

Name	CAS number	% (w/w)
calcium hypochlorite	7778-54-3	60 - 100
calcium carbonate	471-34-1	1 - 5
calcium dihydroxide	1305-62-0	1 - 5
Calcium chloride (CaCl2), dihydrate	10035-04-8	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. Fire-fighting measures

Flammability of the product : Strong oxidizing agent.

Extinguishing media

Suitable : Use flooding quantities of water. USE WATER ONLY

Not suitable : Do not use water jet Do not use dry chemical extinguishers containing ammonium compounds.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

:

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Do not store above the following temperature: 52°C (125.6°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
calcium dihydroxide	US ACGIH 3/2012	-	5	-	-	-	-	-	-	-	
	AB 4/2009	-	5	-	-	-	-	-	-	-	[3]
	BC 9/2011	-	5	-	-	-	-	-	-	-	
	ON 7/2010	-	5	-	-	-	-	-	-	-	
	QC 9/2011	-	5	-	-	-	-	-	-	-	
calcium carbonate	AB 4/2009	-	10	-	-	-	-	-	-	-	[3]
		-	10	-	-	-	-	-	-	-	[a]
[3]Skin sensitization **Form:** [a]Total dust. **Notes:** [A]Calcium hypochlorite [B]Calcium hydroxide											

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required. No monitoring equipment are required if no occupationnal exposure limit values are suggested.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Personal protection

Respiratory : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: disposable particulate mask

8. Exposure controls/personal protection

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Chemical-resistant, impervious gloves
4 - 8 hours (breakthrough time): Chemical-resistant, impervious gloves
1 - 4 hours (breakthrough time): Chemical-resistant, impervious gloves
< 1 hour (breakthrough time): Chemical-resistant, impervious gloves

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. If operating conditions cause high dust concentrations to be produced, use dust goggles. Recommended: safety glasses with side-shields

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Personal protective equipment (Pictograms) :

9. Physical and chemical properties

Physical state	: Solid. [Powder. Leaflets. Pellets.]	**Molecular formula**	: Not applicable.	**Flammable limits**	: Not available.
Color	: White.	**Molecular weight**	: Not applicable.	**Burning rate**	: Not available.
Odor	: Pungent. [Strong]	**Vapor pressure**	: Not available.	**Burning time**	: Not available.
Relative density	: 2.35	**Vapor density**	: Not available.	**Critical temperature**	: Not available.
pH	: 10.4 [Conc. (% w/w): 1%]	**Volatility**	: Not available.	**Auto-ignition temperature**	: Not available.
Viscosity	: Not available.	**Evaporation rate**	: Not available.	**Flash point**	: [Product does not sustain combustion.]
Odor threshold	: 1.4 ppm	**Ionicity (in water)**	: Not available.	**Dispersibility properties**	: Not dispersible in the following materials: cold water and hot water.

Solubility : Partially soluble in the following materials: cold water and hot water.

Melting/freezing point : 100.01°C (212°F)

Boiling/condensation point : Not available.

10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Materials to avoid : Reactive or incompatible with the following materials:
oxidizing materials
Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, organic materials and acids.
This product is chemically reactive with many substances, including, other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive, flammable or combustible materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

The symptoms, hazards and situations described in this section are not expected when manufacturer's direction for use, proper security measures and given professionnal exposure limits are correctly followed.

Potential chronic health effects

Chronic effects : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : May cause damage to the following organs: stomach.
Contains material which may cause damage to the following organs: lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : No specific data.

11. Toxicological information

Skin : Adverse symptoms may include the following:
irritation
redness

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

Medical conditions aggravated by over-exposure :
Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
calcium hypochlorite	LD50 Oral	Rat	850 mg/kg	-
calcium dihydroxide	LD50 Oral	Rat	7340 mg/kg	-
	LD50 Oral	Rat	7340 mg/kg	-
Calcium chloride (CaCl2), dihydrate	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	1000 mg/kg	-
	LD50 Oral	Rat - Male	3798 mg/kg	-
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
calcium dihydroxide	Eyes - Severe irritant	Rabbit	-	10 milligrams	-
calcium carbonate	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Carcinogenicity Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
calcium hypochlorite	-	3	-	-	-	-

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Exposure	Species
calcium hypochlorite	-	Acute EC50 0.073 ppm Fresh water	48 hours	Daphnia - Water flea - Daphnia magna - Larvae
	-	Acute LC50 55 µg/l Marine water	48 hours	Crustaceans - Common mud crab - Panopeus herbstii - Larvae
	-	Acute LC50 23 µg/l Fresh water	96 hours	Fish - Rainbow smelt - Osmerus mordax - Fry
calcium dihydroxide	-	Acute LC50 33884.4 µg/l Fresh water	96 hours	Fish - Zambezi barbel - Clarias gariepinus - Fingerling
Calcium chloride (CaCl2), dihydrate	OECD 201 Alga, Growth Inhibition Test	Acute EC50 2700 mg/l Growth rate	72 hours	Aquatic plants - Selenastrum capricornutum
	OECD 202 *Daphnia* sp. Acute Immobilization Test and Reproduction Test	Acute EC50 2400 mg/l	48 hours	Daphnia - Daphnia magna
	EPA	Acute LC50 19400 mg/l	48 hours	Crustaceans - Cyclops abyssorum prealiinus
	EPA	Acute LC50 2770 mg/l	48 hours	Daphnia - Daphnia magna
	EPA	Acute LC50 13400 mg/l	96 hours	Fish - Gambusia affinis
	EPA	Acute LC50 10650 mg/l	96 hours	Fish - Lepomis macrochirus
	EPA	Acute LC50 4630 mg/l	96 hours	Fish - Pimephales promelas
calcium carbonate	-	Acute LC50 >56000000 µg/l Fresh water	96 hours	Fish - Western mosquitofish - Gambusia affinis - Adult
	-	Chronic NOEC 61 mg/g Fresh water	42 days	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)

Toxicity of the products of biodegradation : The products of degradation are more toxic than the product itself.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste stream : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1748	UN1748 CALCIUM HYPOCHLORITE DRY MIXTURE RQ	5.1	II		
TDG Classification	1748	UN1748 CALCIUM HYPOCHLORITE DRY MIXTURE	5.1	II		-

PG* : Packing group

15. Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists : **CEPA Toxic substances**: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canada inventory : All components are listed or exempted.

Other certification :

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

16. Other information on the product

Label requirements : CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.

References : - Manufacturer's Material Safety Data Sheet.

Date of printing (YYYY-MM-DD) : 2012-10-16.

Date of issue (YYYY-MM-DD) : **2012-10-16.**

Note: MSDS are valid for a 3 years period after the date of issue

Indicates information that has changed from previously issued version.

MSDS prepared by:
QA and Documentation Department

Manufactured for:
Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

Notice to reader

There are potential hazards to people and goods associated with the use of this product which are detailed in the present Material Safety Data Sheet (MSDS). To minimize potential hazards associated with this product it is of users responsibility to conform the directions for use and all other instructions provided in the Material Safety Data Sheet (MSDS) of this product. The manufacturer, distributors and suppliers of this product are exonerating themselves and consequently shall not be liable for any prejudice or damage of any kind, resulting from the use of this product which may not be in accordance with the directions for use or all the instructions provided in the present Material Safety Data Sheet (MSDS) or resulting from an unadvised use of the present product..

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)