

Material Safety Data Sheet

	HMIS	TDG Road/	Rail		Health Hazard		0
0					Fire Hazard		0
4	×)				Reactivity		
Ľ.					Personal Protection		(
					This MSDS is providen a product is not WHIMS re- regulated under the PCP consumer product.	gulated. The product is	5
1. Product	and company	identification					
Product name : CH	HLOR BLAST		Code	: 2	29-93210		
Date of issue (yyyy/mm/d	id) : 2014-05-30.		Material uses	: 0	Consumer products: Pool & S	Spa water treatment proc	ducí
1	eachcomber Hot Tubs plus inc 2345, Comber Way surrey, BC, Canada		Manufacturer	E 1	Manufactured for: Beachcomber Hot Tubs Plus 13245, Comber Way Surrey, BC, Canada	Inc	
	s identification	not expected when manufact	urer's direction	for us	e and proper security m	neasures are observ	ed
hysical state	: Solid.	Odor : Chlorine					
		[Strong]					
Emergency overview	: DANGER!	[Strong]					
Emergency overview	Harmful by inhalation ar	[Strong] nd if swallowed. Corrosive to the ey Use only with adequate ventilation.					
	Harmful by inhalation ar or on skin or clothing.	nd if swallowed. Corrosive to the ey Use only with adequate ventilation.					
Routes of entry	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion	nd if swallowed. Corrosive to the ey Use only with adequate ventilation.					
Routes of entry <u>Potential acute health ei</u> Inhalation : Toxic b	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion.	nd if swallowed. Corrosive to the ey Use only with adequate ventilation.	Keep container tig	htly clo	sed and sealed until ready fo	or use. Wash thoroughly	ý
Routes of entry Potential acute health ef Inhalation : Toxic b followir	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion.	nd if swallowed. Corrosive to the ey Use only with adequate ventilation. espiratory system. Exposure to dec	Keep container tig	htly clo	sed and sealed until ready fo	or use. Wash thoroughly	y
Inhalation : Toxic b followir Ingestion : Toxic it Skin : Corrosi	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion. ffects by inhalation. Corrosive to the re og exposure. f swallowed. May cause burns t ive to the skin. Causes burns.	nd if swallowed. Corrosive to the ey Use only with adequate ventilation. espiratory system. Exposure to dec	Keep container tig	htly clo	sed and sealed until ready fo	or use. Wash thoroughly	y
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Routes of entry Potential acute health ef Inhalation : Toxic b followir Ingestion : Toxic if Skin : Corrosi Eyes : Corrosi See toxicological inform	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion. ffects by inhalation. Corrosive to the re og exposure. f swallowed. May cause burns t ive to the skin. Causes burns.	nd if swallowed. Corrosive to the ey Use only with adequate ventilation. espiratory system. Exposure to dec to mouth, throat and stomach.	Keep container tig	htly clo	sed and sealed until ready fo	or use. Wash thoroughly	ý
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Routes of entry Potential acute health ef Inhalation : Toxic b followir Ingestion : Toxic if Skin : Corrosi Eyes : Corrosi See toxicological inform 3. Compoo Name troclosene sodium There are no additional	Harmful by inhalation ar or on skin or clothing. after handling. Inhalation. Ingestion. flects by inhalation. Corrosive to the re og exposure. f swallowed. May cause burns to ive to the skin. Causes burns. ive to eyes. Causes burns. ive to eyes. Causes burns. ive to eyes. Causes burns. bation (Section 11) for more de osition/informat	nd if swallowed. Corrosive to the ey Use only with adequate ventilation. espiratory system. Exposure to dec to mouth, throat and stomach. etails. tion on ingredier	Keep container tig composition product	s may c	sed and sealed until ready for cause a health hazard. Seric <u>CAS number</u> 2893-78-9	or use. Wash thoroughly bus effects may be delay <u>% (w/w)</u> 60 - 100	ved

Lyc contact	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

: Strong oxidizing agent. Contact with combustible material may cause fire.
: Do not use water jet Use flooding quantities of water. Do not use dry chemical extinguishers containing ammonium compounds. May reacts explosively with calcium hypochlorite in the presence of water.
: Do not use water jet Do not use dry chemical extinguishers containing ammonium compounds.
: 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.
: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
: Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes. May reacts explosively with calcium hypochlorite in the presence of water.

6. Accidental release measures

Personal precautions Environmental precautions

unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). 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).

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and

Methods for cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. 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. 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

lling : Put on suggested personnal protective equipment when handling the product. Avoid contact with skin and eyes. Do not ingest. This product is formulated for commercial, institutionnal and industrial uses only.

Storage : Store in cool ventilated place. Keep container tightly closed when product is stored. Protect from freezing. Keep out of reach of children.

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
No exposure limit value known.											

Consult local authorities for acceptable exposure limits.

Personal protection

Respiratory	: No specific protective equipment suggested
Hands	: It is suggested to use chemical imprevious protective gloves when using this product
Eyes	: It suggested to wear safety glasses when handling or using chemical products.
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. Recommended: safety apron

9. Physical and chemical properties

Physical state	: Solid.	Molecular formula	: Not applicable.	Flammable limits	: Not available.
Color	: White.	Molecular weight	: Not applicable.	Burning rate	: Not available.
Odor	: Chlorine [Strong]	Vapor pressure	: Not available.	Burning time	: Not available.
Relative density	: Not available.	Vapor density	: Not available.	Critical temperature	: Not available.
рН	: 6 [Conc. (% w/w): 1%]	Volatility	: Not available.	Auto-ignition temperature	: Not available.
Viscosity	: Not available.	Evaporation rate	: Not available.	Flash point	: Not available.
Odor threshold	: Not available.	lonicity (in water)	: Not available.	Dispersibility properties	: Not available.
Solubility	: Not available.				
Melting/freezing p	Not available.		Boi	ling/condensation point : Not a	vailable.
	:				

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. Keep away from water.
Materials to avoid	: Reactive or incompatible with the following materials: reducing materials combustible materials acids alkalis May react violently with calciur hypochlorite and water
	Avoid materials likes: nitrogen containing materials, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.
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.

Toxicological information 11.

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	n effects
Chronic effects	:
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	: Contains material which causes damage to the following organs: lungs, gastrointestinal tract, eye, lens or cornea. Contains material which may cause damage to the following organs: mucous membranes, skin.

Over-exposure signs/symptoms

Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	÷	Adverse symptoms may include the following: stomach pains
Skin	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Eyes	•	Adverse symptoms may include the following: pain watering redness
Medical condi	itio	ons 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
troclosene sodium	LC50 In LD50 O	halation Vapor	Rat Rat	847.5 mg/ 1420 mg/		4 hours -
Carcinogenicity Classification	2000 0		, lui	1120 119/1	.9	
Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
troclosene sodium	-	4	Е	-	-	None.

Ecological information 12.

Ecotoxicity

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: Do not contaminate water by cleaning of equipment or disposal of wastes. Toxic to aquatic organisms. When used according to the label instructions, hazards to non-target plants and aquatic organisms are very low.

<u>Aquatic ecotoxicity</u> Product/ingredient name	Test	Result	Exposure	Species
troclosene sodium	-	Acute EC50 0.11 ppm Fresh water	48 hours	Daphnia - Water flea - Daphnia magna - <24 hours
	-	Acute LC50 0.217 ppm Fresh water	96 hours	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss
Toxicity of the products of biodegradation	: The products of biode	gradation are less toxic than the original product		

13. Disposal considerations

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste stream

Waste disposal

: 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.

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	2465	UN2465 DICHLOROISOCYANURIC ACID DRY (troclosene sodium)	5.1	II	OUDDEER 5.1	-
TDG Classification	2465	DICHLOROISOCYANURIC ACID SALTS (troclosene sodium)	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	:At least one component is not listed.				
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 BURNS. HARMFUL IF INHALED OR SWALLOWED.

 References
 : - Manufacturer's Material Safety Data Sheet.

 Date of printing (YYYY-MM-DD)
 : 2014-05-30.

 Date of issue (YYYY-MM-DD)
 : 2014-05-30.

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: Beachcomber Hot Tubs Plus Inc 13245, Comber Way Surrey, BC, Canada

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)