



Superior Solutions

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Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name FS CHLOR 5
Product use Food Industry - C.I.P. Cleaner
Product code 1157
Date of issue 06/18/14 **Supersedes** 01/10/12

Emergency Telephone Numbers

For MSDS Information:

Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

Prepared By

Technical Services Group
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Edmonton, Alberta T5S 1N6

Section 2. Hazards Identification

Emergency overview

WARNING !

HARMFUL IF SWALLOWED.

Harmful in contact with skin. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Corrosive to eyes. Eye contact can result in corneal damage or blindness.

Skin

Harmful in contact with skin. Corrosive to the skin. Skin contact may produce burns. The amount of tissue damage depends on length of contact. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Harmful by inhalation. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing.

Ingestion

Toxic if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects

Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

SODIUM CARBONATE; soda ash; carbonic acid, disodium salt

497-19-8

30 - 60

SODIUM HYDROXIDE; caustic soda; soda lye

1310-73-2

10 - 30

SODIUM DICHLORO-s-TRIAZINETRIONE, DIHYDRATE; sodium dichlorocyanurate

51580-86-0

1 - 5

dihydrate

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Contact

Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Not applicable
Flammable Limits	Not applicable
Flammability	Non-combustible.
Auto-ignition Temperature	
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Wear special protective clothing and positive pressure, self-contained breathing apparatus. Cool closed containers exposed to fire with water.
Fire hazard	No specific fire or explosion hazard.
Products of Combustion	Chlorine. and nitrogen trichloride
Explosion hazard	Not available.

Section 6. Accidental Release Measures

Spill Clean up	Put on appropriate personal protective equipment (see Section 8). Move containers from spill area. Use appropriate tools to transfer the spilled solid to a convenient waste disposal container. To clean the floor and all objects contaminated by this material, use detergent solution. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see Section 8). Do not use with other products. Do not get in eyes or on skin or clothing. Do not ingest. Do not breathe dust. Keep container tightly closed in a cool, well-ventilated place. Use only with adequate ventilation. Wash thoroughly after handling. Wash contaminated clothing before reusing.
Storage	Contains moisture-sensitive material. Store in a dry place. 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. Keep container tightly closed and sealed until ready for use. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
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No exposure limit value known.

Personal Protective Equipment (PPE)

Eyes	Face shield. Chemical splash goggles.
Hands and Body	Chemical resistant boots. Chemical-resistant apron. Chemical-resistant gloves. Neoprene gloves. or Rubber gloves.
Respiratory	Wear appropriate respirator when ventilation is inadequate. Dust respirator.



Section 9. Physical and Chemical Properties

Physical State	Solid. [Powder.]	Color	White.
pH	1% Solution. (12.5-13.5)	Odor	Mild. Chlorine.
Boiling Point	Not applicable	Vapor Pressure	Not applicable
Specific Gravity	Not applicable	Vapor Density	Not applicable
Solubility	Partially soluble in the following materials: cold water and hot water.	Evaporation Rate	Not applicable
Freezing Point		VOC (Consumer)	Not applicable

Section 10. Stability and Reactivity**Stability and Reactivity**

The product is stable.

Incompatibility

Reactive or incompatible with the following materials: organic materials and acids.

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

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

Section 11. Toxicological Information**Carcinogenicity**

Not available.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sodium carbonate	LD50 Oral	Rat	2800 mg/kg	-
troclosene sodium, dihydrate	LD50 Dermal	Rabbit	11000 mg/kg	-
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	620 mg/kg	-

Mutagenicity**Conclusion/Summary**

: Not available.

Teratogenicity**Conclusion/Summary**

: Not available.

Reproductive toxicity**Conclusion/Summary**

: Not available.

Section 12. Ecological Information**Environmental Effects**

No known significant effects or critical hazards.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
sodium carbonate	-	Acute EC50 242000 µg/	Algae - Diatom -	96 hours
	-	l Fresh water	Navicula seminulum	
	-	Acute LC50 176000 µg/	Crustaceans - Scud	48 hours
	-	l Fresh water	Order - Amphipoda	
	-	Acute LC50 265 mg/l	Daphnia	96 hours
	-	Acute LC50 265000 µg/	Daphnia - Water flea -	48 hours
sodium hydroxide	-	l Fresh water	Daphnia magna	
	-	Acute LC50 300 mg/l	Fish - Bluegill.	96 hours
	-	Acute EC50 40.38 mg/l	Crustaceans - Water flea	48 hours
	-	Fresh water	- Ceriodaphnia dubia -	
	-		Neonate	
	-	Acute LC50 125 ppm	Fish - Western	96 hours
troclosene sodium, dihydrate	-	Fresh water	mosquitofish -	
	-		Gambusia affinis - Adult	
	-	Acute EC50 0.28 ppm	Daphnia - Water flea -	48 hours
	-	Fresh water	Daphnia magna	
	-	Acute LC50 0.25 ppm	Fish - Rainbow trout,	96 hours
	-	Fresh water	donaldson trout -	
			Oncorhynchus mykiss	

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream


Code: D002

Classification: - [Hazardous waste.]

Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
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TDG Classification	3262	Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide)	8	II		<u>Explosive Limit and Limited Quantity Index</u> 1
IMDG Class	Not available.	Not available.	Not available.	-		-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada)

Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

Class E: Corrosive material

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.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.