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1. Product and Company Identification

Product Code: Z-ACTION5%
Product Name: ACTION 5%
Trade Name: ACTION 5X
Company Name: Stoller Enterprises

284 Industrial Drive

Regina, SK,

Web site address: http://stollerenterprises.ca/

Emergency Contact: CHEMTREC, In the US and Canada call 1 (800)424-9300

CHEMTREC, From other countries call +1 (703)527-3887

Information: For agricultural use only 1 (800)539-5283

Intended Use: For agricultural use only

2. Hazards Identification

Serious Eye Damage/Eye Irritation, Category 2



GHS Signal Word: Warning

GHS Hazard Phrases: H319 - Causes serious eye irritation.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+313 - If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal

Phrases:

No phrases apply.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects Hazards not otherwise classified (HNOC) or not covered by GHS: None.

(Acute and Chronic): Chronic exposures to skin and mucous membranes that cause irritation may cause a

chronic dermatitis or mucosal membrane problem.

Inhalation: Inhaling mist, spray, or vapor may cause irritation to upper respiratory tract (nose and

throat). Nasal mucosal and oropharyngeal eythema.

Skin Contact: Skin irritation. Skin exposure may cause slight irritation, redness, itching, swelling. May

cause more severe response if skin is damp, abraded (scratched or cut), or covered by clothing, gloves or footwear. Prolonged contact may cause more severe symptoms.

Damage is localized to contact areas.

Eye Contact: Causes eye irritation. Eye exposure may cause serious eye irritation and pain. May

cause conjuntival swelling and cornea opacification from hypertonic solution. Corneal

eye pain, redness, acute corneal thickening or whitening.

Ingestion: Consumption of hypertonic solutions causes nausea, vomiting, and increased thirst.

Medical Conditions Generally Any skin condition that disrupts the skin, such as abrasions, cuts, psoriasis, fungal

Aggravated By Exposure: infections, etc. Any eye condtion that compromises tear production, conjunctiva, or

normal corneal homestasis.

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3. Composition/Information on Ingredients				
CAS#	Components (Chemical Name)	Concentration		
22691-02-7	Calcium chloride (CaCl2), hydrate	<30.0 %		

4. First Aid Measures

Emergency and First Aid

Procedures:

Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. Always bring with victim a copy of label and SDS of product to health

professional.

In Case of Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

In Case of Skin Contact: Wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off

contaminated clothing and wash before re-use.

In Case of Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If irritation occurs, get medical advice/attention.

In Case of Ingestion: Give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth

to an unconscious person. Do NOT induce vomiting. Obtain medical attention

immediately if ingested. Do not leave victim unattended. Wear impervious gloves while decomtaminating skin and hair. Call a POISON CENTER or doctor/physician if you feel

unwell.

Signs and Symptoms Of

Exposure:

Solution and/or solids may be visible on the skin and/or eyes. Localized redness, warmth, and irritation consistent with mechanism of injury: abrasion, burn, hypertonic

solution.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: N.A.

Explosive Limits: LEL: N.A. UEL: N.A.

Autoignition Pt: N.A.

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable Extinguishing

Media:

None known.

Fire Fighting Instructions: Keep unnecessary people away; isolate hazard area and deny entry. Fight fire for other

material that is burning. Water should be applied in large quantities as fine spray. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Wear protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing wih self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations,

refer to the relevant sections.

Flammable Properties and

Hazards:

This material does not burn.

Hazardous Combustion

Formed under fire conditions: hydrogen chloride gas, calcium oxide

Products:

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6. Accidental Release Measures

Protective Precautions, **Protective Equipment and** Emergency Procedures:

Isolate the area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard on some surfaces. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Environmental Precautions:

Prevent entry into waterways, sewers, basements or confined areas. See Section 12,

Ecological Information.

Steps To Be Taken In Case Material Is Released Or Spilled:

Small and large spills: Contain spilled material if possible. Absorb with materials such as sand. Collect in suitable and properly labeled containers. Flush residue with water. See Section 13, Disposal Considerations, for additional information.

7. Handling and Storage

Precautions To Be Taken in Handling:

Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling. Wear personal protective equipment as described in Section 8, Exposure Controls/Personal Protection.

Precautions To Be Taken in Storing:

Protect from atmospheric moisture. Keep containers tightly closed when not in use. Keep separated from incompatible substances see Section 10, Stablility and Reactivity.

8. Exposure Controls/Personal Protection

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
22691-02-7	Calcium chloride (CaCl2), hydrate	No data.	TLV: 10 mg/m³	No data.

Respiratory Equipment (Specify Type):

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or quidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: high efficiency particulate air (HEPA) N95. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Eye Protection:

Wear safety glasses with side-shields. Wear chemical safety goggles and/or a face-shield to protect against skin and eye contact when appropriate.

Protective Gloves:

Use gloves chemically resistant to this material. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Examples of preferred glove barrier materials include: Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions.specifications provided by the glove supplier.

Other Protective Clothing: **Engineering Controls** (Ventilation etc.):

Wear clean, body-covering clothing. Wear appropriate clothing to avoid skin contact. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Work/Hygienic/Maintenance Practices:

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and affected skin immediately after handling, before smoking or eating, before breaks, and at the end of the workday.

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	9. Physical and Chemical Properties	
Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Clear to light yellow color. Very slight characteristic odor.	
pH:	< 1	
Freezing Point:	N.E.	
Boiling Point:	> 240.00 F	
Flash Pt:	N.A.	
Evaporation Rate:	N.E.	
Flammability (solid, gas):	Material will not burn.	
Explosive Limits:	LEL: N.A. UEL: N.A.	
Vapor Pressure (vs. Air or mm Hg):	N.E.	
Vapor Density (vs. Air = 1):	N.E.	
Specific Gravity (Water = 1):	1.26	
Density:	~ 10.5 LB/GA	
Solubility in Water:	Soluble	
Saturated Vapor	N.E.	
Concentration: Octanol/Water Partition Coefficient:	No data.	
Percent Volatile:	N.A.	
Autoignition Pt:	N.A.	
Decomposition Temperature:		
Viscosity:	N.E.	
	10. Stability and Reactivity	
Reactivity:	Hygroscopic.	
Stability:	Unstable [] Stable [X]	
Conditions To Avoid - Instability:	Stable under normal temperatures and pressures.	
Incompatibility - Materials To	Avoid contact with: bromide trifluoride. 2-furan percarboxylic acid because calcium	
Avoid:	chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalizes exothermic polymerization of methyl vinyl ether. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.	
Hazardous Decomposition or Byproducts:	Formed under fire conditions: hydrogen chloride gas, calcium oxide	
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]	
Conditions To Avoid - Hazardous Reactions:	None known.	

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11. Toxicological Information

Toxicological Information: Mutagenicity: This product has not been investigated for mutagenic effects.

> Embryotoxicity: This product has not been investigated for embryotoxic effects. Teratogenicity: This product has not been investigated for teratogenic effects. Reproductive Toxicity: This product has not been investigated for toxic reproductive

effects.

No data available. Irritation or Corrosion: Symptoms related to

Toxicological Characteristics: No data available.

No data available.

Sensitization:

Chronic Toxicological

Carcinogenicity/Other

Effects:

Information:

The toxicological properties of this material have not been fully investigated.

No component is listed as a carcinogenic by IARC, NTP, OSHA, and ACGIH.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological

Information:

The available data on this material does not indicate any undue hazard to the environment under anticipated use and storage. All work practices must be aimed at eliminating environmental contamination. Any waste due to spillage or leakage should be contained and disposed of accordingly, see above under Section 6 "Accidental Release Measures."

Results of PBT and vPvB

assessment:

No data available.

Persistence and

Degradability:

Calcium chloride is believed not to persist in the environment because it is readily dissociated into calcium and chloride ions in water. Both ions originally exist in nature, and their concentrations in surface water will depend on various factors, such as

geological parameters, weathering and human activities.

Calcium chloride and its dissociated forms (calcium and chloride ions) are ubiquitous in Bioaccumulative Potential:

> the environment. Calcium and chloride ions can also be found as constituents in organisms. Considering its dissociation properties, calcium chloride is not expected to

accumulate in living organisms.

Chloride ions are mobile in soil eventually drainig into surface water. Mobility in Soil:

13. Disposal Considerations

PRODUCT: Reuse or reprocess, if possible. Waste disposal must be done following all Waste Disposal Method:

Federal, State and Local regulations. Regulations may vary in different locations. Report spills if applicable. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local waste

regulatory authority.

CONTAINER: Dispose properly accordingly to regulations on empty containers in your

locality or make available to a container reconditioning facility for recycling.

14. Transport Information

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LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

Trade Name: ACTION 5%

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name:

UN Number:

Hazard Class: TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated. Trade Name: ACTION 5%

UN Number: Packing Group:

Hazard Class:

IMDG MFAG Number: N.A.

IMDG EMS Page:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated. Trade Name: ACTION 5%

Additional Transport Placards / Markings: N.A.

Information:

Emergency Response Guide Number: N.A.

Reportable Quantity: N.A.

15. Regulatory Information

16. Other Information

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HEALTH 1
FLAMMABILITY 0
REACTIVITY 0
PPE

HMIS:

Health 1 O Special Hazard

Additional Information About No data available.

This Product:

Company Policy or

Hazard Rating System:

Disclaimer: