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1. Product and Company Identification

Product Code: Z-ACTION X
Product Name: ACTION X
Trade Name: ACTION X
Company Name: Stoller

Company Name: Stoller Phone Number: 9090 Katy Freeway 1 (713)461-1493

Suite 400

Houston, TX 77024

Web site address: www.stollerusa.com

Email address: compliance@stollerusa.com

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

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

Information: 1 (800)539-5283

Intended Use: For agricultural use only

2. Hazards Identification

Serious Eye Damage/Eye Irritation, Category 2

Acute Toxicity: Skin, Category 4
Acute Toxicity: Oral, Category 4
Corrosive To Metals, Category 1





GHS Signal Word: Warning

GHS Hazard Phrases: H350 - Keep out of reach of children; may be harmful if swallowed, inhaled or in contact

with skin; may cause eye irritation. May cause damage through prolonged exposure.

H290 - May be corrosive to metals.

GHS Precautionary Phrases: P234 - Keep only in original container.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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

GHS Response Phrases: P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

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

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

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

P337+313 - If eye irritation persists, get medical advice/attention. P362+364 - Take off contaminated clothing and wash it before reuse.

P390 - Absorb spillage to prevent material damage.

GHS Storage and Disposal

Phrases:

P501 - Dispose of contents/container to permitted waste facility.

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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).

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, pain, and/or

damage to the eye.

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 condition that compromises tear production, conjunctiva, or

normal corneal homeostasis.

3. Composition/Information on Ingredients

CAS#	Components (Chemical Name)	Concentration	RTECS#
22691-02-7	Calcium Chloride	<15.0 %	EV9800000
7647-01-0	Hydrochloric acid	< 1.0 %	MW4025000

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:

Signs and Symptoms Of

Exposure:

Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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 firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during

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firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with 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

Products:

Formed under fire conditions: hydrogen chloride gas, calcium oxide

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:

We recommend storing pails a maximum of three pails high. Do not stack pallets. Store container tightly closed in a cool/well-ventilated dry place protected from sunlight above 40 F. Do not allow container to freeze. Store locked up. Protect from atmospheric moisture. Keep containers tightly closed when not in use. Keep separated from incompatible substances see Section 10, Stability and Reactivity.

Other Precautions:

Do not reuse empty container. Do not contaminate water when disposing of equipment wash water.

8. Exposure Controls/Personal Protection

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
22691-02-7	Calcium Chloride	No data.	TLV: 10 mg/m³	No data.
7647-01-0	Hydrochloric acid	CEIL: 5 ppm	CEIL: 2 ppm	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 guidelines, 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. NOTICE: The selection of a

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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 and 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.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Colorless to light amber liquid.

Very slight characteristic odor.

pH: < 2
Freezing Point: N.E.

Boiling Point: No data.

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): 1.12 - 1.16

Density: ~ 9.5 LB/GA

Solubility in Water: Soluble
Saturated Vapor N.E.

Concentration:

Octanol/Water Partition

No data.

Coefficient:

Percent Volatile: N.A.

Autoignition Pt: N.A.

Decomposition Temperature: N.A.

Viscosity: N.E.

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10. Stability and Reactivity

Reactivity: Hygroscopic.

Stability: Unstable [] Stable [X]

Stable under normal temperatures and pressures. Conditions To Avoid -

Instability:

Avoid:

Incompatibility - Materials To Avoid contact with: bromide trifluoride. 2-furan per carboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes 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 Formed under fire conditions: hydrogen chloride gas, calcium oxide

Byproducts:

Possibility of Hazardous

Reactions:

Will occur [] Will not occur [X]

Conditions To Avoid -

None known.

Hazardous Reactions:

11. Toxicological Information

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

> 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.

Irritation or Corrosion:

Symptoms related to

Toxicological Characteristics: No data available. No data available.

Sensitization:

Chronic Toxicological

No data available.

Effects:

Carcinogenicity/Other 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."

Do not apply directly to water, to areas where surface water is present, or to intertidal

areas below the mean high water mark.

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.

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

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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.

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

13. Disposal Considerations

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

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

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, N.O.S. Contains Hydrochloric acid

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN1760 Packing Group: III

CORROSIVE

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name:

UN Number: 1760 Packing Group: III

Hazard Class: 8 - CORROSIVE TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Corrosive liquid, N.O.S. Contains Hydrochloric acid

UN Number: 1760 Packing Group: III

Hazard Class: 8 - CORROSIVE

IMDG MFAG Number: N.A.

IMDG EMS Page:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Corrosive liquid, N.O.S. Contains Hydrochloric acid

UN Number: 1760 Packing Group: III

Hazard Class: 8 - CORROSIVE

Additional Transport Placards / Markings: N.A.

Information:

Emergency Response Guide Number: N.A.

Reportable Quantity: N.A.

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15. Regulatory Information

Regulatory Information: TSCA Inventory: In compliance with inventory requirements for commercial purposes.

16. Other Information

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Hazard Rating System:





HMIS:

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

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