



a member of the Roche Group

Material Safety Data Sheet

Material Name: Activator CM

MSDS ID: VEN-012

Section 1 - Chemical Product and Company Identification

Product Number(s): 760-4297

Chemical Name: Activator CM

Manufacturer Information

Ventana Medical Systems Inc.

1910 E. Innovation Park Drive

Tucson, AZ 85755

Phone: 1-520-887-2155

Emergency # 1-800-424-9300 (USA/Canada)

1-703-527-3887 (International)

Use of the Substance/Preparation:

Clinical/research

Substance Registration Number(s):

None necessary.

Section 2 - Hazards Identification

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

EU Classification

Xi - Irritant

Human and Environmental Hazards

Emergency Overview

This material is a clear, colorless, odorless liquid and may cause respiratory tract irritation.

Major Health Hazards:

This material may cause respiratory tract irritation.

Potential Health Effects: Inhalation

Short Term Exposure: irritation, cough, sore throat, chest pain, difficulty breathing

Long Term Exposure: irritation

Potential Health Effects: Skin

Short Term Exposure: irritation

Long Term Exposure: irritation

Potential Health Effects: Eyes

Short Term Exposure: irritation

Long Term Exposure: irritation

Potential Health Effects: Ingestion

Short Term Exposure: nausea, vomiting, diarrhea

Long Term Exposure: no information on significant adverse effects

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Environmental Hazards

None known.

Section 3 - Composition/Information on Ingredients

EC #	Component	Percent	Symbols	Risks
-	Magnesium chloride 7786-30-3	30-60	Xi	R:37
-	Non-Hazardous	30-60	-	-
-	ProClin 300	<1	Xi	R:43

Component Information/Information on Non-Hazardous Components

This preparation has been classified for the European Union according to Annex VI Directives 67/548/EEC and 99/45/EC.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

Section 4 - First Aid Measures

First Aid: Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

First Aid: Skin

Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing before reuse. Get medical attention, if needed.

First Aid: Eyes

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

First Aid: Ingestion

If a large amount is swallowed, get medical attention.

Section 5 - Fire-Fighting Measures

General Fire Hazards

Negligible fire hazard.

Suitable Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

Unsuitable Extinguishing Media

None identified.

Hazardous Combustion Products

Hydrogen chloride, oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of sulfur, phosphine

Fire Fighting Equipment/Instructions

Wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus. Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

Sensitivity to Mechanical Impact

Not sensitive

Sensitivity to Static Discharge

Not sensitive

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Section 6 - Accidental Release Measures

Containment Procedures

Stop leak if possible without personal risk.

Clean-Up Procedures

Wear appropriate personal protective equipment (impervious gloves). Absorb spill with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

Evacuation Procedures

Not necessary.

Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

Environmental Precautions

Do not allow the spilled product to enter public drainage system or open water courses.

Special Measures

Regulations vary. All waste material should be packaged, labeled, transported, and disposed of in accordance with federal and local regulations. Consult local authorities before disposal.

Section 7 - Handling and Storage

Handling Procedures

Avoid breathing vapor or mist. Wash thoroughly after handling.

Storage Procedures

Store and handle in accordance with all current regulations and standards. Store between 2 C and 8 C. See original container for storage recommendations. Keep separated from incompatible substances.

Specific Use

Clinical/research

Section 8 - Exposure Controls/Personal Protection

Exposure Limits

ACGIH, NIOSH, OSHA, EU, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom have not developed exposure limits for any of the substances in this preparation.

Occupational Exposure Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses or goggles are recommended when there is a potential for eye contact.

Personal Protective Equipment: Skin

Lab coat or apron.

Personal Protective Equipment: Hands

Wear appropriate chemical resistant gloves (latex, vinyl).

Personal Protective Equipment: Respiratory

No respirator is required under normal conditions of use.

Personal Protective Equipment: General

Use good hygiene practices when handling this material including changing and laundering work clothes after use. A safety shower should be available. An eyewash fountain should be available in the work area.

Environmental Exposure Controls

Avoid release to the environment.

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Section 9 - Physical and Chemical Properties

Appearance:	Clear, colorless liquid	Odor:	Odorless
Physical State:	Liquid	pH:	Neutral
Vapor Pressure:	Not available	Vapor Density (air=1):	Not available
Boiling Point:	Not available	Solubility (H₂O):	Miscible
Specific Gravity (water=1):	Not available	Freezing Point:	Not available
Evaporation Rate:	Not available	Viscosity:	Not available
Percent Volatile:	Not available	Octanol/H₂O Coeff.:	Not available
Flash Point:	Not flammable	Flash Point Method:	Not available
Upper Flamm. Limit (UFL):	Not available	Lower Flamm. Limit (LFL):	Not available
Auto Ignition:	Not available	Decomposition Temp.:	Not available
Odor Threshold:	Not available	Coeff. of Water/Oil Dist.:	Not available

Section 10 - Stability and Reactivity

Chemical Stability

Stable at normal temperatures and pressure.

Conditions to Avoid

None reported.

Materials to Avoid

Acids, bases, halogenated compounds, oxidizing materials, reducing agents

Hazardous Decomposition Products

Hydrogen chloride, oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of sulfur, phosphine

Hazardous Polymerization

Will not polymerize.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

This material may cause respiratory tract irritation.

B: Component Analysis - LD50/LC50

Magnesium chloride (-)

Oral LD50 Rat 2800 mg/kg (IUCLID)

Repeated Dose Toxicity

No information on significant adverse effects.

Inhalation Effects

May cause irritation, cough, sore throat, chest pain, and difficulty breathing. Long term inhalation may cause irritation.

Skin Effects

May cause irritation. Long term skin exposure may cause irritation.

Eye Effects

May cause irritation. Long term eye exposure may cause irritation.

Ingestion Effects

May cause nausea, vomiting, and diarrhea. No significant adverse effects are known for long term ingestion.

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Carcinogenicity

A: General Product Information

No information available for the mixture.

B: Carcinogenicity

None of the substances in this preparation are listed by ACGIH, OSHA, NIOSH, NTP, IARC, Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, Netherlands, Spain, or United Kingdom.

Mutagenicity

No information available for the mixture.

Reproductive Effects

No information available for the mixture.

Tumorigenic

No information available for the mixture.

Target Organs

Respiratory tract

Medical Conditions Aggravated by Exposure

Kidney disorders

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No information available for the mixture.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Magnesium chloride (-)

Duration/Test/Species	Concentration/Conditions/Notes
96 Hr LC50 Gambusia affinis	4210 mg/L [static]
96 Hr LC50 Pimephales promelas	1970-3880 mg/L [static]
72 Hr EC50 Desmodesmus subspicatus	2200 mg/L
24 Hr EC50 Daphnia magna	1400 mg/L
48 Hr EC50 Daphnia magna	140 mg/L [Static]

Mobility

No information available for the mixture.

Persistence & Degradation

No information available for the mixture.

Bioaccumulative Potential

No information available for the mixture.

Other Adverse Effects

No information available for the mixture.

Section 13 - Disposal Considerations

Waste Disposal Instructions

A: General Product Information

Dispose in accordance with all applicable regulations.

B: Component Waste Numbers

No Waste Numbers are applicable for this product's components.

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Section 14 - Transport Information

US DOT Information

Shipping Name: Not regulated.

TDG Information

Shipping Name: Not regulated.

ADR Information

Shipping Name: Not regulated.

RID Information

Shipping Name: Not regulated.

IATA Information

Shipping Name: Not regulated.

ICAO Information

Shipping Name: Not regulated.

IMDG Information

Shipping Name: Not regulated.

Section 15 - Regulatory Information

EU MARKING AND LABELLING:

Symbol(s):

Xi - Irritant

Risk Phrases

R37 Irritating to respiratory system.

Safety Phrases

S60 This material and its container must be disposed of as hazardous waste.

US State Regulations

A: General Product Information

No additional information available.

B: Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

US Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312

Acute Health: Yes Chronic Health: No Fire: No Pressure: No Reactive: No

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Canadian Regulations

WHMIS Classification: Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Section 16 - Other Information

Full text of all Risk Phrases in Sections 3

R37 Irritating to respiratory system.

R43 May cause sensitization by skin contact.

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Limitations: The information and recommendations set forth in this MSDS are believed to be correct as of this date. Ventana Medical Systems, Inc. makes no warranty with respect to the content of this MSDS and disclaims all liability from reliance thereon.

Revision History

New MSDS: 06/04/09

End of Sheet VEN-012