



a member of the Roche Group

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

VENTANA MEDICAL SYSTEMS INC.
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EMERGENCY TELEPHONE NUMBER:
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(CHEMTREC)
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MSDS NUMBER: 00231335

SUBSTANCE: Enhancer V-Red

TRADE NAMES/SYNONYMS:
Enhanced Enhancer/V-Red

PRODUCT NUMBER(S): 253-2182, 853-2182

PRODUCT USE: clinical/research

CREATION DATE: Oct 27 2005
REVISION DATE: Mar 05 2009

2. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0

EC CLASSIFICATION:
No classification assigned.



EMERGENCY OVERVIEW:

COLOR: colorless

PHYSICAL FORM: liquid

ODOR: odorless

MAJOR HEALTH HAZARDS: respiratory tract irritation

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: gastrointestinal irritation, changes in blood pressure, nausea, vomiting, diarrhea, difficulty breathing, headache, drowsiness, dizziness, disorientation, loss of coordination, heart disorders, coma

LONG TERM EXPOSURE: kidney damage

3. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: NON-HAZARDOUS

CAS NUMBER: Not assigned.

EC NUMBER: Not assigned.

PERCENTAGE: 60-100

EC CLASSIFICATION: No classification assigned.

COMPONENT: MAGNESIUM CHLORIDE

CAS NUMBER: 7786-30-3

EC NUMBER (EINECS): 232-094-6

PERCENTAGE: 7-13

EC CLASSIFICATION: Xi

RISK PHRASES: 37

COMPONENT: LEVAMISOLE HYDROCHLORIDE

CAS NUMBER: 16595-80-5

EC NUMBER (EINECS): 240-654-6

PERCENTAGE: <1

EC CLASSIFICATION: T

RISK PHRASES: 25

COMPONENT: PROCLIN 300

CAS NUMBER: Not assigned.

EC NUMBER: Not assigned.

PERCENTAGE: <1

EC CLASSIFICATION: Xi

RISK PHRASES: 43

4. FIRST AID MEASURES

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

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

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

INGESTION: If a large amount is swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE FIGHTING: 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

FLASH POINT: not flammable

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

7. HANDLING AND STORAGE

STORAGE: 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.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

Enhancer V-Red:

No occupational exposure limits established.

VENTILATION: Provide adequate ventilation. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Safety glasses or goggles are recommended when there is a potential for eye contact. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Lab coat or apron.

GLOVES: Wear appropriate chemical resistant gloves.

PROTECTIVE MATERIAL TYPES: latex, vinyl

RESPIRATOR: No respirator is required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid

APPEARANCE: clear

COLOR: colorless

ODOR: odorless

BOILING POINT: Not available

FREEZING POINT: Not available

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not available

SPECIFIC GRAVITY: Not available

WATER SOLUBILITY: miscible

PH: acidic

VOLATILITY: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: None reported.

INCOMPATIBILITIES: oxidizing materials

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

MAGNESIUM CHLORIDE:

TOXICITY DATA: 2800 mg/kg oral-rat LD50

LOCAL EFFECTS:

Irritant: inhalation

ACUTE TOXICITY LEVEL:

Moderately Toxic: ingestion

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: kidney disorders

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: Not regulated.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: Not regulated.

LAND TRANSPORT ADR: Not regulated.

LAND TRANSPORT RID: Not regulated.

AIR TRANSPORT IATA: Not regulated.

AIR TRANSPORT ICAO: Not regulated.

MARITIME TRANSPORT IMDG: Not regulated.

15. REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355 Subpart B): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355 Subpart C): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370 Subparts B and C):

ACUTE: Yes

CHRONIC: No

FIRE: No

REACTIVE: No

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

STATE REGULATIONS:

California Proposition 65: Not regulated.

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: Not a Controlled Product under Canada's Workplace Hazardous Material

Information System.

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED):

No classification assigned.

16. OTHER INFORMATION

EC RISK PHRASES:

R 25	Toxic if swallowed.
R 37	Irritating to respiratory system.
R 43	May cause sensitization by skin contact.

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