



*a member of the Roche Group*

## MATERIAL SAFETY DATA SHEET

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**VENTANA MEDICAL SYSTEMS INC.**  
**1910 E. Innovation Park Drive**  
**Tucson, Arizona 85755**  
**(520) 887-2155**

**EMERGENCY TELEPHONE NUMBER:**  
**(800) 424-9300 (USA/Canada)**  
**(CHEMTREC)**  
**+1 (703) 527-3887 (International)**

**MSDS NUMBER:** 00232986

**SUBSTANCE:** ultraView™ AP Red ISH HybReady

**PRODUCT NUMBER(S):** XXX-4355

**PRODUCT USE:** clinical/research

**CREATION DATE:** May 16 2008

**REVISION DATE:** Mar 05 2009

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### 2. HAZARDS IDENTIFICATION

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



**EC CLASSIFICATION:**

T Toxic

Reproductive Toxin Category 2

**RISK PHRASES:**

R 61 May cause harm to unborn child.

**EMERGENCY OVERVIEW:**

**PHYSICAL FORM:** liquid

**MAJOR HEALTH HAZARDS:** harmful if inhaled, respiratory tract irritation, skin irritation, eye irritation

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:**

**SHORT TERM EXPOSURE:** irritation, nausea, vomiting, stomach pain, headache, dizziness, lung congestion, unconsciousness

**LONG TERM EXPOSURE:** irritation, nausea, headache, kidney damage, liver damage, unconsciousness

**SKIN CONTACT:**

**SHORT TERM EXPOSURE:** irritation

**LONG TERM EXPOSURE:** irritation

**EYE CONTACT:**

**SHORT TERM EXPOSURE:** irritation, eye damage

**LONG TERM EXPOSURE:** irritation, eye damage

**INGESTION:**

**SHORT TERM EXPOSURE:** gastrointestinal irritation, nausea, vomiting, diarrhea, stomach pain, weight loss, headache, dizziness

**LONG TERM EXPOSURE:** kidney damage, liver damage

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### 3. COMPOSITION, INFORMATION ON INGREDIENTS

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**COMPONENT:** FORMAMIDE

**CAS NUMBER:** 75-12-7

**EC NUMBER (EINECS):** 200-842-0

**PERCENTAGE:** 40-70

**EC CLASSIFICATION:** Reproductive Toxin Category 2

**RISK PHRASES:** 61

**COMPONENT:** NON-HAZARDOUS

**CAS NUMBER:** Not assigned.

**EC NUMBER:** Not assigned.

**PERCENTAGE:** 7-13

**EC CLASSIFICATION:** No classification assigned.

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### 4. FIRST AID MEASURES

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**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.

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### 5. FIRE FIGHTING MEASURES

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**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

**HAZARDOUS COMBUSTION PRODUCTS:**

Thermal decomposition or combustion products: oxides of carbon, oxides of nitrogen, oxides of sulfur

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## 6. ACCIDENTAL RELEASE MEASURES

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**OCCUPATIONAL RELEASE:**

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

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## 7. HANDLING AND STORAGE

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**STORAGE:** Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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**EXPOSURE LIMITS:**

**FORMAMIDE:**

20 ppm (30 mg/m<sup>3</sup>) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

30 ppm (45 mg/m<sup>3</sup>) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)

10 ppm ACGIH TWA (skin)

10 ppm (15 mg/m<sup>3</sup>) NIOSH recommended TWA 10 hour(s) (skin)

DFG MAK (cutaneous absorption danger)

20 ppm (37 mg/m<sup>3</sup>) UK WEL TWA

30 ppm (56 mg/m<sup>3</sup>) UK WEL STEL

**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:** nitrile

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**PHYSICAL STATE:** liquid  
**ODOR:** Not available  
**BOILING POINT:** Not available  
**FREEZING POINT:** Not available  
**VAPOR PRESSURE:** Not available  
**VAPOR DENSITY:** Not available  
**SPECIFIC GRAVITY:** Not available  
**WATER SOLUBILITY:** miscible  
**PH:** Not available  
**VOLATILITY:** Not available  
**ODOR THRESHOLD:** Not available  
**EVAPORATION RATE:** Not available  
**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Not available

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## 10. STABILITY AND REACTIVITY

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**REACTIVITY:** Stable at normal temperatures and pressure.

**CONDITIONS TO AVOID:** None reported.

**INCOMPATIBILITIES:** oxidizing materials

**HAZARDOUS DECOMPOSITION:**

Thermal decomposition or combustion products: oxides of carbon, oxides of nitrogen, oxides of sulfur

**POLYMERIZATION:** Will not polymerize.

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## 11. TOXICOLOGICAL INFORMATION

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**FORMAMIDE:**

**IRRITATION DATA:** 100 mg eyes-rabbit severe

**TOXICITY DATA:** >3900 ppm/6 hour(s) inhalation-rat LC50; 17 gm/kg skin-rabbit LD50; 4000 mg/kg oral-rat LD50

**LOCAL EFFECTS:**

Irritant: inhalation, skin, eye

**ACUTE TOXICITY LEVEL:**

Toxic: inhalation

Moderately Toxic: ingestion

Slightly Toxic: dermal absorption

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## 12. ECOLOGICAL INFORMATION

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Not available

## 13. DISPOSAL CONSIDERATIONS

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Dispose in accordance with all applicable regulations.

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## 14. TRANSPORT INFORMATION

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**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.

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## 15. REGULATORY INFORMATION

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**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:** D2A, D2B.

**EUROPEAN REGULATIONS:**

**EC CLASSIFICATION (CALCULATED):**

T	Toxic
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Reproductive Toxin Category 2

**DANGER/HAZARD SYMBOL:**



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**EC RISK AND SAFETY PHRASES:**

R 61	May cause harm to unborn child.
S 38	In case of insufficient ventilation, wear suitable respiratory equipment.
S 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 53	Avoid exposure - obtain special instructions before use.
S 60	This material and its container must be disposed of as hazardous waste.

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**16. OTHER INFORMATION**

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**EC RISK PHRASES:**

R 61 May cause harm to unborn child.

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