



a member of the Roche Group

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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: 00232393

SUBSTANCE: INFORM® HER2 DNA Probe

PRODUCT NUMBER(S): 780-4332

PRODUCT USE: clinical/research

CREATION DATE: Jan 17 2007

REVISION DATE: Mar 05 2009

2. HAZARDS IDENTIFICATION

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:

COLOR: colorless to amber

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

3. COMPOSITION, INFORMATION ON INGREDIENTS

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:** DEXTRAN SULFATE SODIUM SALT**CAS NUMBER:** 9011-18-1**EC NUMBER:** Not assigned.**PERCENTAGE:** 10-30**EC CLASSIFICATION:** No classification assigned.**COMPONENT:** NON-HAZARDOUS**CAS NUMBER:** Not assigned.**EC NUMBER:** Not assigned.**PERCENTAGE:** 7-13**EC CLASSIFICATION:** No classification assigned.**COMPONENT:** TE BUFFER, pH 8.0**CAS NUMBER:** Not assigned.**EC NUMBER:** Not assigned.**PERCENTAGE:** <1**EC CLASSIFICATION:** No classification assigned.

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

HAZARDOUS COMBUSTION PRODUCTS:

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

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. Protect from freezing. See original container for storage recommendations. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

FORMAMIDE:

20 ppm (30 mg/m³) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

30 ppm (45 mg/m³) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)

10 ppm ACGIH TWA (skin)

10 ppm (15 mg/m³) NIOSH recommended TWA 10 hour(s) (skin)

DFG MAK (cutaneous absorption danger)

20 ppm (37 mg/m³) UK WEL TWA

30 ppm (56 mg/m³) 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid

COLOR: colorless to amber

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: 7.4 approximate

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, iodine, pyridines, sulfur trioxide

HAZARDOUS DECOMPOSITION:

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

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

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

DEXTRAN SULFATE SODIUM SALT:

TOXICITY DATA: 20600 mg/kg oral-rat LD50

ACUTE TOXICITY LEVEL:

Relatively Non-toxic: ingestion

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):

ETHYLENEDIAMINETETRAACETIC ACID: 5000 LBS RQ

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: Yes

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
	Reproductive Toxin Category 2

DANGER/HAZARD SYMBOL:



T

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.

16. OTHER INFORMATION

EC RISK PHRASES:

R 61	May cause harm to unborn child.
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