



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: 00231348

SUBSTANCE: Bluing Reagent

PRODUCT NUMBER(S): 760-2037

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: harmful if inhaled, respiratory tract irritation, skin irritation, eye irritation

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation, cough, difficulty breathing

LONG TERM EXPOSURE: no information on significant adverse effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation, blisters, skin disorders, allergic reactions

LONG TERM EXPOSURE: irritation, allergic reactions

EYE CONTACT:

SHORT TERM EXPOSURE: irritation, blurred vision

LONG TERM EXPOSURE: irritation

INGESTION:

SHORT TERM EXPOSURE: irritation, sore throat, nausea, vomiting, stomach pain, diarrhea

LONG TERM EXPOSURE: irritation

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: SODIUM CARBONATE

CAS NUMBER: 497-19-8

EC NUMBER (EINECS): 207-838-8

PERCENTAGE: 3-7

EC CLASSIFICATION: Xi

RISK PHRASES: 36

COMPONENT: LITHIUM CARBONATE

CAS NUMBER: 554-13-2

EC NUMBER (EINECS): 209-062-5

PERCENTAGE: <1

EC CLASSIFICATION: Xn

RISK PHRASES: 22-36

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

WATER RELEASE:

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

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:

Bluing Reagent:

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: basic
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: strong acids, oxidizing materials, aluminum

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

SODIUM CARBONATE:

IRRITATION DATA: 500 mg/24 hour(s) skin-rabbit mild; 100 mg/24 hour(s) eyes-rabbit moderate; 100 mg/30 second(s) rinsed eyes-rabbit mild; 50 mg eyes-rabbit severe

TOXICITY DATA: 2300 mg/m³/2 hour(s) inhalation-rat LC₅₀; 4090 mg/kg oral-rat LD₅₀

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

Corrosive: ingestion

ACUTE TOXICITY LEVEL:

Toxic: inhalation

Moderately 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): 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:

Known to the state of California to cause the following:

LITHIUM CARBONATE

Developmental toxicity (Jan 01, 1991)

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: D2B.

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED):

No classification assigned.

16. OTHER INFORMATION

EC RISK PHRASES:

R 22	Harmful if swallowed.
R 36	Irritating to eyes.

“RTECS®” is a United States trademark owned and licensed under authority of the U.S. Government, by and through Symyx Software, Inc. Portions ©Copyright 2001, U.S. Government. All rights reserved.

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.