

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

MSDS NUMBER: 00231600

SUBSTANCE: DAB OD

PRODUCT NUMBER(S): 760-4216

PRODUCT USE: clinical/research

CREATION DATE: Feb 10 2006 **REVISION DATE:** Mar 05 2009

EMERGENCY TELEPHONE NUMBER:

(800) 424-9300 (USA/Canada)

(CHEMTREC)

+1 (703) 527-3887 (International)

2. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=0 REACTIVITY=0

EC CLASSIFICATION:

No classification assigned.

EMERGENCY OVERVIEW: COLOR: golden to reddish-brown PHYSICAL FORM: liquid

ODOR: odorless

MAJOR HEALTH HAZARDS: No significant target effects reported.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: no information on significant adverse effects **LONG TERM EXPOSURE:** no information on significant adverse effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation, allergic reactions

LONG TERM EXPOSURE: irritation

EYE CONTACT:

SHORT TERM EXPOSURE: irritation



LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: nausea, vomiting, stomach pain

LONG TERM EXPOSURE: no information on significant adverse effects

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: POLYETHYLENE GLYCOLS

CAS NUMBER: 25322-68-3 EC NUMBER: Not assigned.

PERCENTAGE: 3-7

EC CLASSIFICATION: No classification assigned.

COMPONENT: 3,3'-DIAMINOBENZIDINE TETRAHYDROCHLORIDE

CAS NUMBER: 7411-49-6

EC NUMBER (EINECS): 231-018-9

PERCENTAGE: <1

EC CLASSIFICATION: No classification assigned.

COMPONENT: SODIUM PHOSPHATE, DIBASIC

CAS NUMBER: 7558-79-4

EC NUMBER (EINECS): 231-448-7

PERCENTAGE: <1

EC CLASSIFICATION: No classification assigned.

COMPONENT: HYDROUS CITRIC ACID

CAS NUMBER: 5949-29-1 EC NUMBER: Not assigned.

PERCENTAGE: <1

EC CLASSIFICATION: Xi RISK PHRASES: 37-38-41

COMPONENT: SODIUM BISULFITE

CAS NUMBER: 7631-90-5

EC NUMBER (EINECS): 231-548-0

PERCENTAGE: <1

EC CLASSIFICATION: Xn RISK PHRASES: 22-31

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

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:

POLYETHYLENE GLYCOLS:

POLYETHYLENE GLYCOLS (MW >200):

10 mg/m3 AIHA WEEL TWA (aerosol)

POLYETHYLENE GLYCOLS (MW 200-600):

1000 mg/m3 DFG MAK (peak limitation category - II, with excursion factor of 8) (inhalable fraction)

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

COLOR: golden to reddish-brown

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: weakly 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, strong acids

HAZARDOUS DECOMPOSITION:

Thermal decomposition or combustion products: oxides of carbon

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

POLYETHYLENE GLYCOLS:

IRRITATION DATA: 500 mg/24 hour(s) skin-rabbit mild; 500 mg/24 hour(s) eyes-rabbit mild

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: kidney disorders

3,3'-DIAMINOBENZIDINE TETRAHYDROCHLORIDE:

ADDITIONAL DATA: IARC has concluded that Benzidine and its salts are carcinogenic. Although this substance is structurally related to Benzidine, there is no current evidence that it is a carcinogen.

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):

Sodium phosphate, dibasic: 5000 LBS RQ **SODIUM BISULFITE:** 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: No 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 22	Harmful if swallowed.
R 31	Contact with acids liberates toxic gas.
R 37	Irritating to respiratory system.
R 38	Irritating to skin.
R 41	Risk of serious damage to eyes.

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