

SAFETY DATA SHEET

Radiacwash

In accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1200 (2012)

REVISION NUMBER: 3
REVISION DATE: April 4, 2016

1. IDENTIFICATION

PRODUCT NAME: Radiacwash

PRODUCT USE: Cleaning Solution

MANUFACTURER:

Biodex Medical Systems
20 Ramsey Road
Shirley, New York 11967-4704
www.biodex.com

TELEPHONE: 1-800-224-6339

EMERGENCY TELEPHONE NUMBER: 631-924-9000

2. HAZARDS IDENTIFICATION

Hazard Classification

Health Hazards

Skin Irritation: Category 2
Serious Eye Damage: Category 1
Specific target organ toxicity – repeated exposure: Category 2

Label Elements:



Signal Word: Danger

Hazard Statements:

Causes skin irritation
Causes serious eye damage
May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statements:**Prevention:**

Wash skin thoroughly after handling.
Wear protective gloves.
Do not eat, drink or smoke when using this product.
Do not breathe vapors.

Response:

IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Get medical advice/attention if you feel unwell.

Storage:

Do not store product below zero degrees C (32 degrees F) or above 38 degrees C (100 degrees F).

Disposal:

Dispose of contents/container in accordance with local regulation.

Other hazards which do not result in GHS classification:

No data available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT(S)	CAS NUMBER	%W/W
Demineralized water	7732-18-5	85.392
Polyethylene glycol octylphenyl ether (Triton™ X-100)	9036-19-5	6.000
Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	5.700
Citric acid	77-92-9	2.900
Benzethonium chloride (Hyamine™1622)	121-54-0	0.008

4. FIRST-AID MEASURES

GENERAL INFORMATION: Get medical attention if required. Show this safety data sheet to the doctor in attendance.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If easy to do, remove any contact lenses. Seek medical attention.

SKIN CONTACT: Remove contaminated clothing and wash skin thoroughly with plenty of water. Seek medical attention if irritation develops.

INHALATION: Remove to fresh air. Get medical attention if effects occur.

INGESTION: Rinse mouth with water and give plenty of water afterwards. Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

Most important symptoms/effects, acute and delayed: Irritating to eyes.

Indication of immediate medical attention and special treatment needed: Chemical eye burns may require extended irrigation. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE- FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

UNSUITABLE EXTINGUISHING MEDIA: None known.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: None known.

SPECIAL PROTECTIVE EQUIPMENT: Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Ventilate area of spill, isolate hazard area deny entry to unnecessary or unprotected personnel. Use appropriate safety equipment. For additional information see Section 8.0, Exposure Controls and Personal Protection.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil and waterways.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: Contain spilled material if possible. Absorb with material such as sand, dirt and collect spilled material in suitable containers for disposal.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Use with adequate ventilation. See Section 8.0, Exposure Controls and Personal Protection.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Do not store product below 0° C (32° F) or above 38° C (100° F).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS :

Occupational Exposure Limits:

COMPONENT(S)	Exposure Limit (TWA)	Source
Poly(ethylene oxide)	10 mg/m ³	AIHA WEEL

APPROPRIATE ENGINEERING CONTROLS: Use with adequate ventilation.

EYE/FACE PROTECTION: Wear safety glasses with side shields when handling.

SKIN AND BODY PROTECTION: Wear coveralls and apron as necessary to prevent contact.

HAND PROTECTION: Impervious chemical resistant gloves.

RESPIRATORY PROTECTION: Respiratory protection should be worn when there is potential for exposure to high vapor levels (e.g., areas not well ventilated). Air purifying respirators with organic vapor cartridge with a particulate pre-filter.

HYGIENE MEASURES: Always observe good personal hygiene measures such as washing after handling the material and before eating, drinking, or smoking.

9. PHYSICAL / CHEMICAL PROPERTIES

APPEARANCE: Bluish/transparent liquid

ODOR: Pungent

ODOR THRESHOLD: No data available

UPPER/LOWER EXPLOSIVE LIMITS: No data available

VAPOR PRESSURE: No data available

VAPOR DENSITY: No data available

pH: 3.5

RELATIVE DENSITY: No data available

MELTING POINT/FREEZING POINT: 0.3° C (35° F)

WATER SOLUBILITY: Soluble

FLASH POINT: >110° C (233° F)

EVAPORATION RATE: 1.2

FLAMMABILITY (SOLID, GAS): No

PARTITION COEFFICIENT (n-OCTANOL/WATER): No data available

AUTO-IGNITION TEMPERATURE: No data available

DECOMPOSITION TEMPERATURE: No data available

VISCOSITY: No data available

10. STABILITY AND REACTIVITY

REACTIVITY: This product is stable and not reactive.

CHEMICAL STABILITY: Stable under normal conditions

POSSIBILITY OF HAZARDOUS REACTIONS: None

CONDITIONS TO AVOID: INCOMPATIBLE MATERIALS: None known

HAZARDOUS DECOMPOSITION PRODUCTS: None known

11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

Ingestion: No data available

Inhalation: No data available

Eye Contact: Causes serious eye damage

Skin Contact: Causes skin irritation

ACUTE TOXICITY (Oral):

COMPONENT(S)	Oral LD50
Citric acid	11,700 mg/kg (rat), 5400-5790 mg/kg (mouse)
Ethylenediaminetetraacetic acid, tetrasodium salt	1,780 mg/kg (rat)
Tetrasodium ethylenediamine triacetate	2,119 mg/kg (estimated)
Polyethylene glycol mono(octylphenyl) ether	1,900-5,000 mg/kg (rat)
Benzethonium chloride	295 mg/kg (rat)

ACUTE TOXICITY (Inhalation):

COMPONENT(S)	Inhalation LC50 (rat)
Tetrasodium Ethylenediamine Triacetate	1-5 mg/L, 4-hour exposure, dust/mist

ACUTE TOXICITY (Dermal): No data available. The dermal LD50s for citric acid, tetrasodium ethylenediamine triacetate, and poly ethylene glycol mono(octylphenyl) are greater than >2000 mg/kg. The dermal LD50 for benzethonium chloride was not available.

REPEATED DOSE TOXICITY: May cause damage to organs through repeated exposure

SERIOUS EYE DAMAGE/EYE IRRITATION: Causes serious eye damage

SKIN CORROSION/IRRITATION: Causes skin irritation

RESPIRATORY OR SKIN SENSITIZATION: No data available

CARCINOGENICITY:

IARC Monographs: Not listed

NTP: Not listed

OSHA: Not listed

GERM CELL MUTAGENICITY: No data available

REPRODUCTIVE TOXICITY: No data available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: No data available

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: May cause damage to organs through prolonged or repeated exposure if inhaled.

ASPIRATION HAZARD: No

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Ingredients in this product have been shown to be moderately toxic to aquatic organisms. There are no ecological toxicity data on the product itself.

PERSISTENCE AND BIODEGRADABILITY: No data available on the product itself

BIOACCUMULATIVE POTENTIAL: No data available on the product itself

MOBILITY IN SOIL: No data available on the product itself

13. DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose of contents/container in accordance with local regulation. The waste generator is responsible for characterizing the waste following product use for proper disposal.

14. TRANSPORT INFORMATION

UNITED STATES DEPARTMENT OF TRANSPORTATION: This product is not regulated by DOT. This material is not a USDOT hazardous material per 49 CFR regulations.

This information refers to the material as manufactured. It is the responsibility of the shipper to determine the final classification of the material.

Note: This material does meet International Maritime Dangerous Goods (IMDG) Marine Pollutant criteria.

15. REGULATORY INFORMATION

U.S. Federal Regulations

(TSCA): The ingredients in this product, as listed in Section 3, are listed on the TSCA Inventory.

EPCRA Section 311/312 HAZARD Categorization:

Immediate (acute) Health:	yes
Delayed (chronic) Health:	yes
Fire:	no
Sudden Release of Pressure:	no
Reactive:	no

EPCRA Section 313:

There are no EPCRA Section 313 listed chemicals at or above de minimis levels in this product.

Clean Water Act : None of the components of this product listed in Section 3 are regulated under the Clean Water Act.

Clean Air Act: None of the components of this product listed in Section 3 are considered Class II Ozone Depleting Substances Under the Clean Air Act.

Resource Conservation and Recovery Act (RCRA): This product as manufactured would not be characterized as a RCRA hazardous waste when disposed. This product as manufactured would not meet Minnesota Lethality characteristics as defined in Minnesota Rules 7045.

California Proposition 65: None of the components of this product listed in Section 3 are listed on the California Proposition 65 list of chemicals known to cause cancer or reproductive toxicity.

U.S. Department of Homeland Security: Not applicable

16. OTHER INFORMATION

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