



## Material Safety Data Sheet

**Product : ENDOMAX**

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

**Manufacturer :**  
**BioShields - A Division of Tulip Diagnostics Pvt. Ltd.**  
Plot No. M – 46, Phase III B,  
Verna Industrial Estate,  
Verna, Goa, 403 722,  
INDIA.

**Product name :** ENDOMAX  
**Synonyms :** 2.4 % Glutaraldehyde Solution.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

The ingredients at their given percentages in this product are not considered hazardous to your health.

Components	CAS Number	Weight %
Glutaraldehyde	111-30-8	2.45

### 3. HAZARDS IDENTIFICATION

**Emergency overview :** None  
**Properties affecting health :** None  
**Principle routes of exposure :**  
**Oral :** Can irritate the tissues of mouth, oesophagus, and other tissues of the digestive system. Symptoms of over exposure can include vomiting, diarrhea and nausea.  
**Eye contact :** Risk of serious damage to eyes.  
**Skin contact :** May cause skin irritation. May aggravate pre-existing dermatitis.  
**Ingestion :** Ingestion of this material may cause oral thrush, nausea, vomiting, epigastric distress, diarrhea, headache, fatigue, dizziness, insomnia, mental confusion, and impairment.  
**Inhalation :** Inhalation of mist or vapours may be severely irritating to the nose, throat and lungs.

**Physico – chemical properties :** This product may cause eye, skin or respiratory irritation.

**Hazard information :**  
**Sensitization :** May cause sensitization by inhalation and skin contact. Glutaraldehyde has been reported to cause occupational asthma and may aggravate pre – existing asthma, inflammatory or fibrotic pulmonary disease.  
**Medical conditions aggravated by exposure :** Inhalation of vapor may cause asthma-like symptoms (chest discomfort and tightness, difficulty with breathing) as well as aggravate pre-existing asthma and inflammatory or fibrotic pulmonary disease.

### 4. FIRST AID MEASURES

**Eye contact :** In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical attention.  
**Ingestion :** Call a physician or Poison Control Center immediately. Do not ingest emetic.  
**Inhalation :** Move to fresh air immediately. If experiencing difficulty breathing, seek medical attention.  
**Skin contact :** Rinse with water. Remove contaminated clothing and wash before re – use. Consult a physician if skin redness or irritation persists.

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**Protection of first-aiders** : No information available.

**Notes to physician** : Probable damage to the mucosa from oral exposure may contraindicate the use of gastric lavage.

## 5. FIRE – FIGHTING MEASURES

<b>Flash point (°F)</b>	: Unknown on product.
<b>Flash point (°C)</b>	: Unknown on product.
<b>Autoignition temperature</b>	: Unknown on product.
<b>Flammable limits in air – lower (%)</b>	: Unknown on product.
<b>Fire fighting information</b>	:
<b>Suitable extinguishing media</b>	: Use water, dry chemical, carbon dioxide or chemical foam.
<b>Extinguishing media which must not be used for safety reasons</b>	: None.
<b>Specific methods</b>	: None.
<b>Special protective equipment for firefighters</b>	: Wear self-contained breathing apparatus for fire fighting if necessary.
<b>Hazardous combustion products</b>	: Carbon dioxide and carbon monoxide.
<b>Explosivity</b>	: None.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	: Wear eye and skin protection while handling material for clean up. (Wear nitrile or latex gloves.) Responders should wear gloves, goggles and suitable body protection. Where there is a risk of product contact with shoes, chemical resistant shoe coverings are recommended.
<b>Environmental precautions</b>	: No special environmental precautions required.
<b>Methods for cleaning up</b>	: <i>Clean – up methods – large spillage</i> Contain spill by placing suitable absorbent material around the edges of the spill and work inward. Carefully scoop up into waste container for disposal. For each estimated gallon of spill disperse about 228 g of sodium bisulfite powder on spill. Thoroughly blend sodium bisulfite into ENDOMAX Solution. Allow 5 minutes for deactivation. Flush with plenty of water. <i>Clean – up methods – small spillage</i> Neutralize with a mixture of equal amounts of household ammonia and water. Flush with water.

## 7. HANDLING AND STORAGE

### Handling:

<b>Technical measures/precautions</b>	: No special technical protective measures required.
<b>Safe handling advice</b>	: Use only in well-ventilated areas. Avoid breathing vapors or mist. Avoid contact with skin and eyes. Eye and skin protection recommended. Wear chemical resistant gloves.

### Storage :

<b>Technical measures/storage conditions</b>	: Store dry in closed package between 15 °C and 30 °C.
<b>Incompatible products</b>	: Avoid contact with strong acids and bases.



## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering controls** : Ensure adequate ventilation, especially in confined areas. Rooms where ENDOMAX Solution is used should have a minimum of 10 air exchanges per hour.
- Eye protection** : Safety glasses required. For routine use, wear ANSI approved safety glasses. Where there is risk of product splashing into eyes, an independent face shield must be worn over the safety glasses.
- Hand protection** : Wear chemical resistant gloves. Gloves should be changed frequently during use of product. Do not use neoprene or polyvinyl chloride (vinyl) gloves as glutaraldehyde may be rapidly absorbed by these materials.
- Skin and body protection** : Wear suitable protective clothing. Wear chemical resistant lab coat.
- Respiratory protection** : None required.
- Other/general protection** : None required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Clear liquid.
- Physical state** : Liquid.
- Colour** : Colourless.
- pH** : 3.5 - 4.5 (unactivated), 8.2 - 9.2 (activated)
- Odor** : Characteristic aldehyde odor.
- Water solubility** : Completely Soluble

## 10. STABILITY AND REACTIVITY

- Chemical stability** : Stable under recommended storage conditions.
- Hazard polymerization** : Hazardous polymerization does not occur.
- Hazardous decomposition products** : None.
- Materials to avoid** : Strong acids and bases.
- Conditions to avoid** : Prolonged heating at temperatures above 40 °C

## 11. TOXICOLOGICAL INFORMATION

### Local effects

- Oral** : Unknown on product.
- Eye irritation** : Severe irritant and corrosive to the eye when tested in animals..
- Skin irritation** : Skin contact may aggravate pre – existing dermatitis.
- Inhalation** : Inhalation of vapor may cause asthma – like symptoms as well as aggravate pre – existing asthma and inflammatory or fibrotic pulmonary disease.

### Chronic toxicity

- Oral** : Unknown on product.
- Inhalation** : Unknown on product.
- Dermal** : Unknown on product.

### Specific effects

- Corrosive effects** : Unknown on product.
- Target organ effects** : None.



## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

<b>Ecotoxicity effects</b>	: This product has no known eco – toxicological effects.
<b>Aquatic toxicity effects</b>	: This product has no known aquatic toxicological effects.
<b>Mobility</b>	: Unknown on product.
<b>Persistence / degradability</b>	: Unknown on product.
<b>Bioaccumulation</b>	: Unknown on product.
<b>Degradation</b>	: Unknown on product.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products** : This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

**Contaminated packaging** : None.

**Methods for cleaning up** : *Clean – up methods – large spillage*

Contain spill by placing suitable absorbent material around the edges of the spill and work inward. Carefully scoop up into waste container for disposal. For each estimated gallon of spill disperse about 228g of sodium bisulfite powder on spill. Thoroughly blend sodium bisulfite into ENDOMAX Solution. Allow 5 minutes for deactivation. Flush with plenty of water.

*Clean – up methods – small spillage*

Neutralize with a mixture of equal amounts of household ammonia and water. Flush with water.

## 14. TRANSPORT INFORMATION

**DOT** : Not Applicable

**IATA/ICAO** : Not Applicable

## 15. REGULATORY INFORMATION

**CAS No.** : Not applicable.

**Labeling** : For External Use Only.

**Safety Phrases** : Avoid contact with the mucous membrane. In case of contact, wash immediately with plenty of water and seek medical attention.

## 16. OTHER INFORMATION

**Additional advice** : None

**Literary Reference** : None

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**End of Safety Data Sheet**

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