

# MSDS

**Material Safety Data Sheet**

**Effective Date: July 31, 2012**

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or Local Poison Control

## WoundSeal Powder (Packaged in individual packages)

### 1. Product Identification

**Synonyms:** Woundseal Powder for Minor External Bleeding from Wounds and Procedures

**Molecular Weight:** N/A – It is a mixture of 2 components.

**Appearance:** brown powder

**Package Size:** <1g

### 2. Identification of Components

| Identification     | Percent by Wt |
|--------------------|---------------|
| Potassium Ferrate  | 10 to 15      |
| Ion Exchange Resin | 85 to 90      |

### 3. Hazard Information

**Health Rating:** 1

**Flammability Rating:** 0

**Reactivity Rating:** 2

**Personal Equipment Needed:** eye protection, dust mask, gowning

A reactivity rating of two is due to the powder's exothermic absorption of water. Thicker liquids, such as blood, absorb more slowly thus reducing the amount of heat generated.

## **Potential Health Effects:**

### **Inhalation:**

If inhaled, the powder may be a temporary respiratory irritant.

### **Ingestion:**

The powder will pass thru the digestive track.

### **Skin Contact:**

The dry powder is not a skin irritant.

### **Eye Contact:**

The powder is an irritant to the eyes contact should be avoided.

### **Chronic Exposure:**

N/D

### **Other:**

WoundSeal reacts exothermically when exposed to water. This could result in a physical burn.

Application of the powder to an exposed dry wound may result in a stinging sensation

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## **4. First Aid Measures**

### **Inhalation:**

Remove the person to fresh air.  
Seek medical attention as needed.

### **Ingestion:**

Do not induce vomiting.  
Seek medical attention as needed.

### **Eye Contact:**

Flush the eye with running water for at least 5 minutes. The eye may be temporarily red.  
Seek medical attention as needed.

### **Skin Contact:**

Remove the dry powder from the skin with a brush.  
Rinse the dry powder with a large volume of water.  
Seek medical attention as needed.

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## 5. Fire Fighting Information

**Combustibility:**

**Flash Point:** No Flash

**Explosive Nature:**

**Explosive Limits:** N/D

**Fire Extinguishing Media:**

Extinguish fires with dry chemicals, sand, soda ash, water, foam, or evacuate the area and allow the fire to burn.

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## 6. Accidental Release Measures

Wear appropriate personal protective equipment. Remove sources of ignition, and ventilate the area. Pick up material in a way to avoid creating dust and dispose in an appropriate container. Properly report any spills that may be an environmental concern.

Disposal of the material is to be conducted in compliance with all governmental regulations.

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## 7. Handling and Storage

Keep the packages in a cool and dry environment. If the powder is removed from its protective packaging, dispose of it because it will inactivate itself by absorbing moisture from the air. Once the powder goes from dark brown to light tan color it is no longer useful.

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## 8. Exposure Controls and Personal Protection

**OSHA Permissible Exposure Limit (PEL):** N/D

**AGGIH Threshold Limit Value (TLV):** N/D

**Ventilation:**

Work in a well ventilated facility. Avoid concentrating the dust in a confined work area.

**Respiratory Protection:** N/A

**Other Personal Protection Equipment:** N/A

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## 9. Physical and Chemical Properties

**Appearance:** Brown powder

**Odor:** None; slightly astringent

**Solubility:** Insoluble

**Density (g/ml):** 0.8

**pH:** N/A (solid powder)

**Vapor Pressure (mmHg):** N/A (solid powder)

**% Volatile by Volume:** N/A (solid powder)

**Freezing Point:** N/A (solid powder)

**Melting Point:** N/A (solid powder)

**Sublimation Point:** Polymer portion of the powder will sublime at  $>300^{\circ}\text{C}$

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## 10. Stability and Reactivity

**Stability:**

Material is very stable if kept cool and dry. It will exothermically react with water and other liquids, producing  $\text{O}_2$  (g) as it decomposes.

**Decomposition Products:**

The byproducts of decomposition when wetted are polymer, iron oxide, and oxygen.

**Hazardous Decomposition Products**

None Known

**Incompatibilities:**

N/A under designed usages

**Conditions to Avoid:**

N/A under designed usages

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## 11. Disposal Measures

Disposal of the material is to be conducted in compliance with local authority requirements.

## 12. Toxicological Information

N/D

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## 13. Miscellaneous Additional Information

### **Storage and Labeling:**

Do not remove the powder from the package until it is to be used.

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### Disclaimer:

The submission of the MSDS is required by law and is not an assertion that the product is hazardous when used in the proper conditions, by trained individuals. The information herein is dependable and accurate to the best of Biolife LLC's knowledge. There is no assertion to any claims if this product is combined with any other material.

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