MKT-FORM-056.0

SDS

Safety Data Sheet

Effective Date: 2019-12-13

Biolife, LLC

8163 25th Court East

Sarasota, FL 34243

Telephone: +1 941.360.1300

or Local Poison Control

1. Chemical Product and Company Identification

1.1. Product Identifier: WoundSeal® Powder (packaged in individual packages)

1.2. **Synonyms: Pro** QR® (Quick Relief) for Minor External Bleeding from Wounds and Procedures

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

1.4. Appearance: Tan/brown powder

1.5. Package Size: <4g

1.6. Manufacturer:

Biolife, LLC, 8163 25th Court East, Sarasota, FL, 34243, USA

Telephone: +1 941.360.1300

www.biolife.com

2. Hazard Identification:

2.1. Health Rating: 1

2.2. Flammability Rating: 1

2.3. Reactivity Rating: 2

2.4. Personal Equipment Needed: Eye protection, dust mask, gowning

A reactivity rating of two is due to the powder's exothermic absorption of water. Large quantities of powder will generate considerable heat when mixed with water.

3. Identification of Components

Identification	Synonym	CAS#	% by Weight
3.1. Potassium ferrate	Fusion ferrate	NA	10 to 15
3.2. Polystyrene sulfonic acid	Ion exchange resin	69011-20-7	85 to 90

4. First Aid Measures

- 4.1. **Inhalation:** If inhaled, the powder may be a temporary respiratory irritant. Remove the person to fresh air. Seek medical attention as needed.
- 4.2. **Ingestion:** Do not induce vomiting. Seek medical attention as needed. the powder will pass through the digestive track.
- 4.3. **Eye Contact:** Flush the eye with running water for at least 5 minutes. The eye may be temporarily red. Seek medical attention as needed.
- 4.4. **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.

5. Fire Fighting Information

- 5.1. **Fire Extinguishing Media:** Do not use foam or water. Extinguish fires with dry chemicals, sand, soda ash, or water fog.
- 5.2. **Special hazards arising from the substance or mixture:** By heating and fire, harmful vapors/gases maybe found.
- 5.3. **General Fire Hazards:** The product is not flammable. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors

6. Accidental Release Measures

- 6.1. Wear appropriate personal protective equipment. Remove sources of ignition and ventilate the area. Pick up material in a manner which avoids dust creation and dispose material in an appropriate container. Properly report any spills that may be an environmental concern.
- 6.2. Disposal of the material is to be conducted in compliance with all governmental regulations.

7. Handling and Storage

- 7.1. Store in a clean, dry place.
- 7.2. Use by expiration date listed.
- 7.3. Discard if product is damaged, opened or powder does not flow freely.

8. Exposure Controls and Personal Protection

- 8.1. OSHA Permissible Exposure Limit (PEL): No data
- 8.2. AGGIH Threshold Limit Value (TLV): No data
- 8.3. **Appropriate Engineering Controls:** Work in a well-ventilated facility. Avoid concentrating the dust in a confined work area.
- 8.4. **Respiratory Protection:** Personal respiratory protective equipment is normally not required.
- 8.5. **Thermal Hazards:** WoundSeal® reacts exothermically when exposed to water. This could result in a physical burn.
- 8.6. Other Personal Protection Equipment: Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practices. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

- 9.1. **Appearance:** Tan/brown powder
- 9.2. **Odor:** None; slightly astringent
- 9.3. **Solubility:** Insoluble
- 9.4. **Density (g/ml):** 0.8
- 9.5. **pH:** N/A (solid powder)
- 9.6. **Vapor Pressure (mmHg):** N/A (solid powder)
- 9.7. **% Volatile by Volume:** N/A (solid powder)
- 9.8. **Combustibility:** Not available
- 9.9. Flash Point: Not available
- 9.10. Explosive Limits: No data
- 9.11. Freezing Point: N/A (solid powder)
- 9.12. **Melting Point:** N/A (solid powder)
- 9.13. Sublimation Point: Polymer portion of the powder will sublimate at >300°C

10. Stability and Reactivity

- 10.1. **Stability:** If the material is kept dry and near 25°C, it is very stable.
- 10.2. **Reactivity:** It will exothermically react with water and other liquids, producing O_2 (g) as it decomposes.
- 10.3. **Decomposition Products:** The byproducts of decomposition when wetted are polymer, iron oxide and oxygen.
- 10.4. Hazardous Decomposition Products: None known
- 10.5. Incompatibilities: N/A under designed usages
- 10.6. Conditions to Avoid: N/A under designed usages

11. Toxicological Information

No Data

12. Ecological Information

Environmental and Ecological impacts are not known.

13. Disposal Measures

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

14. Transportation Information

- 14.1. **DOT:** Not regulated as a dangerous good.
- 14.2. IATA: Not regulated as a dangerous good.
- 14.3. **Storage and Labeling:** Do not remove the powder from the package until it is ready to be used.

15. Regulatory Information

- 15.1. US Regulations: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200
- 15.2. Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
 - 15.2.1. Immediate (Acute) Health Hazard? Yes
 - 15.2.2. Delayed (Chronic) Health Hazard? No
 - 15.2.3. Fire Hazard? No
 - 15.2.4. Reactive Hazard? No
 - 15.2.5. Sudden Release of Pressure Hazard? No
 - 15.2.6. To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

15.3. Canadian Regulations:

- 15.3.1. WHMIS information: D2B- eye or skin irritant. Refer elsewhere in the SDS for specific warning and safe handling information.
- 15.3.2. CPR Statement: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Regulations (CPR) and the SDS contains all the information required by the CPR.

16. Other Information

Disclaimer: The submission of the SDS 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.

Biolife, LLC is providing the contained herein information in good faith but is making no assertion or claim that is it accurate or comprehensive. The aforementioned information in this document is solely meant as a guide to the precautionary handling of packaged product by a properly trained person using this product. The properly trained individual using this product must use their expertise and independent judgment to determine the appropriate use for this product. Biolife, LLC makes no warranty or representation that this information is complete and is applicable to any situation. Biolife, LLC will not be held accountable for any damage resulting from the use or reliance on the aforementioned information contained within this document.