

Material Safety Data Sheet (MSDS) for Protein G Magnetic Beads

11/2011

I. Identification:

Product name: Protein G Magnetic Beads

Product Catalog: 8740

Substance/Preparation: Preparation

A suspension of protein G covalently bound to proprietary amorphous silica beads in aqueous benzyl alcohol.

Identified Use: This product is for *in vivo* laboratory Research Use Only and is not intended for use in humans. It is not intended for Diagnostic or therapeutic use.

Supplier: Cell Signaling Technology
3 Trask Lane
Danvers, MA 01923 USA
978-867-2300 TEL
978-867-2400 FAX
978-578-6737 EMERGENCY TEL

II. Composition/Information on Ingredients:

| Component | CAS# | % Volume | Symbol | Risk Phrase |
|----------------|----------|------------|--------------|-------------|
| Benzyl alcohol | 100-51-6 | 0.3 – 1.3% | Xn (Harmful) | R 20/22 |

III. Hazard Identification:

EMERGENCY OVERVIEW

OSHA: Non-hazardous

EU: This product is not classified according to Directive 1999/45/EC.

Appearance: Brown suspension.

Possible routes of exposure:

Eye/Skin Contact: May cause irritation to eyes, skin.

Ingestion: May cause gastrointestinal tract irritation.

Inhalation: May cause respiratory tract irritation

Risk Phrases: None

Safety Phrases: S26 In case of contact with eyes rinse with plenty of water and seek medical advice.

IV. First Aid Measures:

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Get medical attention or call Poison Control Center for most current information.

Skin exposure: In case of contact, immediately wash skin with soap and water for at least 15 minutes. Remove contaminated clothing. Wash clothing before reuse.

Eye exposure: In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Get medical attention.

V. Fire Fighting Measures:

Flash Point: Not flammable.

Autoignition Temperature: Not considered to be a fire hazard.

Explosion: Not applicable.

Fire extinguishing media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Firefighting: Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

VI. Accidental Release Measures:

Wear appropriate personal protective equipment. Avoid contact with spilled material. Avoid breathing vapor or mist. Provide adequate ventilation.

VII. Handling And Storage:

Store in tightly closed container at +4°C.

Keep and use in a well ventilated area. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

VIII. Exposure Controls/Personal:

Ventilation System: A system of local and/or general exhaust is recommended.

Skin Protection: Wear compatible chemical resistant gloves and protective clothing, such as a lab coat.

Eye protection: Wear protective safety glasses or chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

IX. Physical And Chemical Properties:

| | |
|-----------------------------|---|
| Appearance: | Brown suspension |
| Odor: | Very faint aromatic |
| Odor threshold: | Benzyl alcohol: 5.5 ppm |
| pH: | 8.5 |
| Melt Point: | 1 to -3°C |
| Boiling Point: | 101 – 103°C |
| Flash Point: | None. Not considered to be a fire hazard. |
| Explosive properties | Not considered to be an explosion hazard. |

X. Stability and Reactivity:

Stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition: Silica aerosols, carbon monoxide and carbon monoxide.

Conditions to avoid: Elevated temperature, heating to dryness. Avoid strong hydrofluoric acid solutions.

XI. Toxicological Information:

Caution: Preparation not yet thoroughly investigated.

| Benzyl Alcohol: | Result: | Species: | Dose: |
|-----------------|-----------------|----------|------------------------|
| | LD50 Oral | Rat | 1230 mg/kg |
| | LD50 Inhalation | Rat | >500 mg/m ³ |
| | LD50 Skin | Rat | 2000 mg/kg |

Draize test, rabbit, skin: 100 mg/24hr Moderate

Draize test, rabbit, skin: 16 mg/48hr Mild

Benzyl alcohol has been investigated as a mutagen.

XII. Ecological Information: Aquatic Ecotoxicity (Calculated for a 1% by weight aqueous benzyl alcohol solution):

LC50 Fathead Minnow: 4.6 g/L

EC50 Daphnia magna: 4.0 g/L

Environmental Fate: The silica beads are expected to be inert in contact with soils and natural waters, and to show little tendency to bioaccumulate. Benzyl alcohol is expected to biodegrade at a moderately rapid rate under both aerobic and anaerobic conditions.

XIII. Disposal Considerations: Dispose of in accordance with federal, state, local environmental regulations.

XIV. Transport Information:

ICAO/IATA: Not regulated.

DOT: Not regulated.

IMDG (sea): Not regulated.

ADR (road): Not regulated.

RID (rail): Not regulated.

XV. Regulatory Information:

OSHA Regulatory Status: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

US Federal Regulations:

TSCA 8b: All components listed or exempted.

SARA 302/304/311 hazardous chemicals: BENZYL ALCOHOL

Clean Water Act (CWA): No products were found.

Clean Air Act: No products were found.

State Regulations: This product does not contain any substances regulated by State Right to Know regulations.

EU Regulations:

Symbols: None

Risk Phrases: None

Safety Phrases: S26 In case of contact with eyes rinse with plenty of water and seek medical advice.

International: Canada (WHMIS): Not classified.

Japan (Poisonous and Deleterious Substances Control Law): Not listed.

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XVI. Other Information:

This compound is sold only for *in vitro* laboratory research use only. It is not for use in humans. It is not intended for use as diagnostic or clinical therapeutic. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.