

Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2016-09-28

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Version: 4

SECTION 1. Identification

Product identifier

Product No 37478
Product name Protein G Agarose Beads

Recommended use of the chemical and restrictions on use

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

Manufacturer, importer, supplier

Manufacturer address Cell Signaling Technology, Inc.
 3 Trask Lane
 Danvers, MA 01923
 United States
 TEL: +1 978 867 2300
 FAX: +1 978 867 2400

Website www.cellsignal.com
Email address support@cellsignal.com
Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

This substance/mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 3

GHS Label elements, including precautionary statements



Signal Word
Warning

Hazard statement(s)
 Flammable liquid and vapor.
 Causes serious eye irritation.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash face, hands and any exposed skin thoroughly after handling.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use CO₂, dry chemical, or foam to extinguish

Store in a well-ventilated place. Keep cool.

Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information

Contact with eyes may cause irritation.

Hazards not otherwise classified (HNOC)

Not applicable.

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown acute toxicity

SECTION 3. Composition/information on ingredients

Chemical name	CAS No	Weight-%
ethanol	64-17-5	15-<25

SECTION 4. First-aid measures

Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact	Wash skin with soap and water.
Inhalation	Move to fresh air.
Ingestion	Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause skin and eye irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Advice for emergency responders

General advice	For further assistance, contact your local Poison Control Center.
Protection of first-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

SECTION 5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Carbon dioxide (CO₂)
Alcohol-resistant foam
Dry chemical

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Explosion Data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. For personal protection see section 8.

Other information No information available.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

SECTION 7. Handling and storage

Precautions for safe handling

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.
Packaging material No information available
Incompatible products Oxidizing agents, Combustible material

SECTION 8. Exposure controls/personal protection

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
ethanol	STEL: 1000 ppm	TWA : 1000 ppm TWA : 1900 mg/m ³	IDLH : 3300 ppm TWA : 1000 ppm TWA : 1900 mg/m ³

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection	Safety glasses with side-shields
Skin and body protection	Wear protective gloves/clothing.
Respiratory protection	In case of inadequate ventilation wear respiratory protection.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Thick Slurry
Color	No information available
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No information available		
Melting point/freezing point	No information available		
Boiling point or initial boiling point and boiling range	No information available		
Flash point	>93 °C / 100 °F		
Evaporation rate	No information available		
Flammability	No information available		
Lower explosion limit	No information available		
Upper explosion limit	No information available		
Vapor pressure	No information available		
Relative vapor density	No information available		
Density and/or relative density	No information available		
Solubility	No information available.		
Solubility in other solvents	No information available.		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Viscosity	No information available		
Viscosity, dynamic	No information available		
<u>Other information</u>			
Softening point	No information available		
Molecular Weight	No information available		
VOC content	No information available		
Liquid Density	No information available		
Bulk density	No information available		

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions None under normal processing.
Hazardous polymerization None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight

Incompatible Materials

Oxidizing agents, Combustible material

Hazardous Decomposition Products

Carbon oxides (COx)

SECTION 11. Toxicological information
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Information on likely routes of exposure

Inhalation There is no data available for this product.
Eye contact Contact with eyes may cause irritation.
Skin contact There is no data available for this product.
Ingestion There is no data available for this product.

Information on toxicological effects

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ethanol	6200 mg/kg (Rat)	20000 mg/kg (Rabbit)	124.7 mg/L (Rat)

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown acute toxicity.

ATEmix (oral) 35300 mg/kg
ATEmix (inhalation-vapor) 623.5 mg/l

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause skin and eye irritation.

Skin corrosion/irritation Not classified.
Serious eye damage/eye irritation Irritating to eyes.
Sensitization No information available.
Mutagenic effects No information available.

Carcinogenicity

Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage

Chemical name	IARC	NTP	OSHA
ethanol 64-17-5	Group 1	Known	X

Reproductive toxicity

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Neurological effects

No information available.

Aspiration Hazard

No information available.

SECTION 12. Ecological information

Ecotoxicity

0% of the mixture consists of components of unknown hazards to the aquatic environment.

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ethanol	-	LC50 12.0 - 16.0 mL/L (Oncorhynchus mykiss) 96 h LC50 100 mg/L (Pimephales promelas) 96 h LC50 13400 - 15100 mg/L (Pimephales promelas) 96 h	LC50 9268 - 14221 mg/L (Daphnia magna) 48 h EC50 2 mg/L (Daphnia magna) 48 h

Persistence and degradability

No information available

Mobility

If product enters soil, it will be mobile and may contaminate groundwater

Bioaccumulation

Low

Chemical name	Octanol-Water Partition Coefficient
ethanol	-0.35

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way. Dispose of wastes in an approved waste disposal facility.

SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

SECTION 15. Regulatory information

North American Inventory Listing

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
ethanol	Listed	Not Listed	Listed	Not Listed

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification

This product does not meet the criteria for classification under the Hazardous Products Act.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical name	California Prop. 65
ethanol	Carcinogen Developmental

U.S. State Right-to-Know Regulations

This product contains the following U.S. State Right to Know chemicals:

Chemical name	New Jersey	Massachusetts	Pennsylvania
ethanol	Listed	Listed	Listed

U.S. FIFRA Label Information

This product does not contain any substances regulated as pesticides.

US Commerce Department - Export Administration Regulations Information

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

U.S. Drug Enforcement Administration Information

This product does not contain any substances regulated under the DEA.

SECTION 16. Other information

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet