



# Cell Signaling

TECHNOLOGY®

**SAFETY DATA SHEET (SDS):** According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

**Issuing Date:** 2014-02-12

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**Version:** 1

## SECTION 1. Identification

### Product identifier

**Product No.** 9863  
**Product name** Protein A Agarose Beads  
**Description** Protein A Agarose Beads are an affinity matrix for the small-scale isolation of immunocomplexes from immunoprecipitations (IP assays).  
**Other means of identification** 9863MC, 9863P, 9863S

### Recommended use of the chemical and restrictions on use

**Identified uses** This product is intended for research purposes only.  
**Uses advised against** This product is not intended for use in diagnostic procedures or therapeutics.  
This product is not intended for use in humans or animals.

### Manufacturer, importer, supplier

**Manufacturer address** Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400  
**Website** www.cellsignal.com  
**Email address** support@cellsignal.com  
**Company phone number** 978-867-2300  
**Emergency telephone number** In case of emergency call CHEMTREC 1-800-424-9300

## SECTION 2. Hazard(s) identification

### Classification

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

<b>Serious eye damage/eye irritation</b>	Category 2B
<b>Flammable liquids</b>	Category 3

### GHS Label elements, including precautionary statements



**Signal Word**

**Warning****Hazard statement(s)**

Causes eye irritation  
Flammable liquid and vapor

**Precautionary Statement(s)**

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

**Supplementary Hazard Information**

Hazards not otherwise classified (HNOC) None

### SECTION 3. Composition/information on ingredients

**Formula** CH<sub>3</sub>CH<sub>2</sub>OH  
**Chemical nature** Ethanol solution.  
**Synonyms** Ethyl alcohol; Alcohol, ethyl; Aethanol; Ethylalcohol; Etylowy alkohol

Chemical Name	CAS No.	Weight %
ethanol	64-17-5	10 - 30

### SECTION 4. First-aid measures

**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

**Skin contact** Immediate medical attention is not required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors. Immediate medical attention is not required. If symptoms persist, call a physician. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion** Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. If swallowed, do not induce vomiting - seek medical advice.

**Most important symptoms and effects, both acute and delayed**

No information or data specific to the product on this toxicological (health) effect is available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician** Treat symptomatically.

**Advice for emergency responders**

**General advice** If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

**Protection of First-aiders** Use personal protective equipment.

## SECTION 5. Fire-fighting measures

### Extinguishing media

- Suitable Extinguishing Media** Cool containers / tanks with water spray. Use: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol-resistant foam.
- Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

### 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** Remove all sources of ignition. Take precautionary measures against static discharges. Use personal protective equipment. Heat, flames and sparks. Ensure adequate ventilation.
- Other information** No information available.

### Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low 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** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

## SECTION 7. Handling and storage

### Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. There is a hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed off safely after use. Avoid static electricity build up with connection to earth.

### Conditions for safe storage, including any incompatibilities

- Technical measures/Storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

<b>Packaging material</b>	No information available.
<b>Incompatible products</b>	Reacts slowly with calcium hypochlorite, silver oxide and ammonia. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate or magnesium perchlorate.

## SECTION 8. Exposure controls/personal protection

### Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
ethanol 64-17-5	STEL 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

(vacated) = Vacated limits revoked by the Court of Appeals decision in *AFL-CIO v. OSHA*, 965 F.2d 962 (11th Cir., 1992).

### 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.

<b>Eye/face protection</b>	Tightly fitting safety goggles.
<b>Skin and body protection</b>	Wear protective gloves/clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## SECTION 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Suspension
<b>Odor</b>	Alcohol
<b>Color</b>	Clear with white suspended solids
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	No information available
<b>Initial boiling point and boiling range</b>	No information available
<b>Flash point</b>	37.8 °C / 100 °F
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Upper flammability limit</b>	No information available
<b>Lower flammability limit</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	No information available
<b>Solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient: n-octanol/water</b>	No information available

<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>VOC content</b>	No information available
<b>Viscosity</b>	No information available
<b>Density</b>	No information available

## SECTION 10. Stability and reactivity

### Reactivity

Reacts with incompatible materials causing a fire and explosion hazard.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

<b>Hazardous reactions</b>	Vapors may form explosive mixtures with air. Exothermic reaction possible with strong oxidizers.
<b>Hazardous polymerization</b>	None under normal processing.

### Conditions to Avoid

Heat, flames and sparks. Heating in air.

### Incompatible Materials

Reacts slowly with calcium hypochlorite, silver oxide and ammonia. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate or magnesium perchlorate.

### Hazardous Decomposition Products

None known based on information supplied.

## SECTION 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	Expected to be an irritant based on components.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	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 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

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

<b>Symptoms</b>	Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Corrosivity</b>	No information available.
<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenicity</b>	This product is not intended for human consumption. Therefore the IARC, NTP and OSHA carcinogenic classification is not relevant for this product.

Chemical Name	IARC	NTP	OSHA
ethanol 64-17-5	1 (Alcohol Drinking)	Known (Alcoholic Beverage Consumption)	X (Alcoholic Beverage Consumption)

**Legend:**

IARC: (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program) Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration) X - Present

<b>Reproductive toxicity</b>	No information available.
<b>Developmental Toxicity</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Blood, Reproductive system, Central nervous system (CNS), Eyes, Respiratory system, Liver, Skin.
<b>Neurological effects</b>	No information available.
<b>Aspiration Hazard</b>	No information available.
<b>Endocrine Disruptor Information</b>	No information available.

## SECTION 12. Ecological information

**Ecotoxicity**

50% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ethanol 64-17-5	-	LC50 12.0 - 16.0 mL/L (Oncorhynchus mykiss) 96 h LC50 13400 - 15100 mg/L (Pimephales promelas) 96 h LC50 100 mg/L (Pimephales promelas) 96 h	LC50 9268 - 14221 mg/L (Daphnia magna) 48 h EC50 10800 mg/L (Daphnia magna) 24 h EC50 2 mg/L (Daphnia magna) 48 h

<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	Not likely to bioaccumulate.
<b>Mobility</b>	Will likely be mobile in the environment due to its water solubility

Chemical Name	Octanol-Water Partition Coefficient
ethanol 64-17-5	-0.32

**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.

**US EPA Waste Number** D001

**California Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical Name	California Hazardous Waste Status
ethanol 64-17-5	Toxic Ignitable

**SECTION 14. Transport information**

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

**SECTION 15. Regulatory information**

**All of the components in the product are on the following Inventory lists:**

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>NDSL</b>	Complies

**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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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

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

Chemical Name	California Prop. 65
ethanol 64-17-5	Carcinogen Developmental

### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ethanol 64-17-5	Listed	Listed	Listed

### U.S. EPA Label Information

This product does not contain any substances regulated as pesticides.

## SECTION 16. Other information

**Issuing Date:** 2014-02-12

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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