

## SAFETY DATA SHEET

Version 5.2  
 Revision Date 08/26/2016  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Protein Standard

Product Number : P5369

Brand : Sigma-Aldrich

Product Use : For laboratory research purposes.

Supplier : Sigma-Aldrich Canada Co.  
 2149 Winston Park Drive  
 OAKVILLE ON L6H 6J8  
 CANADA

Manufacturer : Sigma-Aldrich Corporation  
 3050 Spruce St.  
 St. Louis, Missouri 63103  
 USA

Telephone : +1 9058299500

Fax : +1 9058299292

Emergency Phone # (For both supplier and manufacturer) : +1-703-527-3887 (CHEMTREC)

Preparation Information : Sigma-Aldrich Corporation  
 Product Safety - Americas Region  
 1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### WHMIS Classification

Not controlled.

Not a hazardous substance or mixture.

##### HMIS Classification

Health hazard: 1  
 Flammability: 0  
 Physical hazards: 0

##### Potential Health Effects

**Inhalation** : May be harmful if inhaled. May cause respiratory tract irritation.

**Skin** : May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** : May cause eye irritation.

**Ingestion** : May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
<b>Sodium azide</b>			
26628-22-8	247-852-1	011-004-00-7	0.1 %
<b>Sodium chloride</b>			
7647-14-5	231-598-3	-	>= 0.7 - <= 0.9 %
<b>Serum albumin</b>			
9048-46-8	232-936-2	-	>= 0.1 - <= 35 %
<b>Water</b>			
7732-18-5	231-791-2	-	>= 63 - <= 99.9 %

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#### 4. FIRST AID MEASURES

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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#### 5. FIREFIGHTING MEASURES

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products****Explosion data - sensitivity to mechanical impact**

No data available

**Explosion data - sensitivity to static discharge**

No data available

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#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Avoid breathing vapours, mist or gas.

**Environmental precautions**

No special environmental precautions required.

**Methods and materials for containment and cleaning up**

Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Personal protective equipment****Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount

of the dangerous substance at the specific workplace.

#### **Hygiene measures**

General industrial hygiene practice.

#### **Specific engineering controls**

Use mechanical exhaust or laboratory fumehood to avoid exposure.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Appearance**

Form	liquid
Colour	colourless

#### **Safety data**

pH	6.0 - 8.0 at 25 °C (77 °F)
Melting point/freezing point	0.0 °C (32.0 °F)
Boiling point	100.0 °C (212.0 °F)
Flash point	No data available
Ignition temperature	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapour pressure	No data available
Density	1.00 g/cm <sup>3</sup>
Water solubility	completely miscible
Partition coefficient: n-octanol/water	No data available
Relative vapour density	No data available
Odour	No data available
Odour Threshold	No data available
Evaporation rate	No data available

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### **10. STABILITY AND REACTIVITY**

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of hazardous reactions**

No data available

#### **Conditions to avoid**

No data available

#### **Materials to avoid**

Acid chlorides, Halogenated hydrocarbon, Metals, Do not store near acids.

#### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.  
Other decomposition products - No data available

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### **11. TOXICOLOGICAL INFORMATION**

**Acute toxicity****Oral LD50**

No data available

**Inhalation LC50**

No data available

**Dermal LD50**

No data available

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

Eyes: No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects****Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**

May be harmful if swallowed.

**Skin**

May be harmful if absorbed through skin. May cause skin irritation.

**Eyes**

May cause eye irritation.

**Signs and Symptoms of Exposure**

Sodium azide/ hydrazoic acid causes a profound lowering of blood pressure and inhibits cellular respiration., Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects.

**Synergistic effects**

No data available

**Additional Information**

RTECS: Not available

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**12. ECOLOGICAL INFORMATION****Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

No data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

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**15. REGULATORY INFORMATION****WHMIS Classification**

Not controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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**16. OTHER INFORMATION****Text of H-code(s) and R-phrases mentioned in Section 3****Further information**

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