Fisher Scientific

Material Safety Data Sheet

10% EZ-Run Protein Gel Solution with buffer

MSDS# 93984

Section 1 - Chemical Product and Company Identification

MSDS Name:	10% EZ-Run Protein Gel Solution with buffer
Catalog Numbers:	BP7710-100, BP7710-30, BP7710-500
Synonyms:	None Known.
Company Identification:	Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	201-796-7100
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#:	79-06-1
Chemical Name:	Acrylamide
%:	10-15
EINECS#:	201-173-7
Hazard Symbols:	

Risk Phrases:

CAS#:	Not available
Chemical Name:	Buffer Component
%:	85-90
EINECS#:	unlisted
Hazard Symbols:	

Text for R-phrases: see Section 16

Hazard Symbols: T

Risk Phrases: 45 46 20/21/22 36/38 43 48/23/24/25 62

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! May cause allergic skin reaction. Cancer suspect agent. Causes eye and skin irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Acrylamide may cause nervous system damage. Acrylamide caused cancer and male reproductive disorders in laboratory animal tests. Target Organs: Eyes, nervous system, reproductive system, skin.

Potential Health Effects

Eye: Causes eye irritation. Acrylamide can be absorbed through the eyes and overexposure will produce the signs and symptoms of neurotoxicity described below.

May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Acrylamide is readily absorbed through unbroken skin and can cause nervous system effects (neurotoxicity).

Skin: These effects can result from a single overexposure but are more likely after repeated exposures to small amounts over a period of days or weeks. Signs and symptoms of overexposure include increased sweating of the hands and feet, numbness, tingling and weakness in the extremities, unsteady gait and decreased reflexes. If the exposure route is dermal, the symptoms may be preceded by peeling and redness of the skin at the areas of exposure, normally the hands and feet.

Ingestion: Harmful if swallowed.

Inhalation: Harmful if inhaled.

Chronic: Prolonged or repeated skin contact may cause dermatitis. May cause cancer according to animal studies. Adverse reproductive effects have been reported in animals. Prolonged or repeated exposure affects the nervous system.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Isolate area and deny entry. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Do not store in direct sunlight. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from acids. Do not store near alkaline substances. Keep away from polymerization catalysts.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Acrylamide	0.03 mg/m3	0.03 mg/m3 TWA	0.3 mg/m3 TWA

	(inhalable fraction and vapor); Skin - potential significant contribution to overall exposure by the cutaneous r oute	60 mg/m3 IDLH	
Buffer Component	none listed	none listed	none listed

OSHA Vacated PELs: Acrylamide: 0.03 mg/m3 TWA Buffer Component: None listed

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Utilize a closed system process where feasible.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Not available

Odor: Not available

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Not available

Specific Gravity/Density:

Molecular Formula: Solution

Molecular Weight: 0

Section 10 - Stability and Reactivity

Chemical Stability: Stable. May polymerize on exposure to light. Polymerization may occur upon heating.

Conditions to Avoid: Light, ignition sources, moisture, heat.

Incompatibilities with Other Materials: Metals, oxidizing agents, reducing agents, acids, bases, peroxides.

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, carbon dioxide, ammonia and/or derivatives, hydrogen gas.

Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#: CAS# 79-06-1: AS3325000

RTECS:

CAS# 79-06-1: Draize test, rabbit, eye: 100 mg/24H Moderate;

LD50/LC50: Draize test, rabbit, skin: 50 mg/3D Mild;
Draize test, rabbit, skin: 500 mg/24H Mild;
Oral, mouse: LD50 = 107 mg/kg;
Oral, rabbit: LD50 = 150 mg/kg;
Oral, rat: LD50 = 124 mg/kg;
Skin, rabbit: LD50 = 1680 uL/kg;
Skin, rat: LD50 = 400 mg/kg;
.
RTECS:
CAS# Trade Secret:.

Carcinogenicity: Acrylamide - ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
California: carcinogen, initial date 1/1/90 NTP: Suspect carcinogen IARC: Group 2A carcinogen
Buffer Component - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not Regulated
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS# 79-06-1: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 45 May cause cancer.

R 46 May cause heritable genetic damage.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitization by skin contact.

R 48/23/24/25 Toxic : danger of serious damage to health by prolonged exposure through inhalation, contact with skin and if swallowed.

R 62 Possible risk of impaired fertility.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 79-06-1: 3

Canada

CAS# 79-06-1 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, D2A

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

CAS# 79-06-1 is listed on Canada's Ingredient Disclosure List

CAS# Trade Secret is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 79-06-1 is listed on the TSCA Inventory.

CAS# Trade Secret is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information

MSDS Creation Date: 8/18/2006

Revision #4 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.