



MATERIAL SAFETY DATA SHEET

NFPA HMIS Personal Protective Equipment



| Health Hazard | 3 |
|---------------|---|
| Fire Hazard | 0 |
| Reactivity | 0 |





See Section 8.

| 1. CHEMICAL PRODUCT AI | ND COMPANY IDENTIFICATION | | | | | |
|-----------------------------|---|--|--|--|--|--|
| Product code: | P1698 | | | | | |
| Product Name: | oly(2-acrylamido-2-methyl-1-propanesulfonic Acid 15% Sollution in Water | | | | | |
| Chemical Name: | No information available | | | | | |
| Synonyms: | No information available | | | | | |
| Recommended use: | No information available. | | | | | |
| CAS #: | Mixture | | | | | |
| Formula: | No information available | | | | | |
| RTECS # | Not available | | | | | |
| CI#: | Not available | | | | | |
| Supplier: | Spectrum Chemicals and Laboratory Products, Inc. | | | | | |
| | 14422 South San Pedro St. | | | | | |
| | Gardena, CA 90248 | | | | | |
| | (310) 516-8000 | | | | | |
| Emergency Telephone Number: | CHEMTREC: 1-800-424-9300 | | | | | |
| Contact Person: | Martin LaBenz (West Coast) | | | | | |
| Contact Person: | Chris Terpak (East Coast) | | | | | |

2. HAZARDS IDENTIFICATION

Product code: P1698

EMERGENCY OVERVIEW

DANGER CORROSIVE!. The product causes burns of eyes, skin and mucous membranes.

Odor:Physical state:Appearance:Color:No information availableLiquid.Viscous.Colorless.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

Causes skin burns.

Eye Contact:

Causes eye burns.

Inhalation:

Irritating to respiratory system. May cause chemical burns to the respiratory tract.

Ingestion:

Can burn mouth, throat, and stomach.

Chronic Potential Health Effects:

Component

Poly(2-acrylamido-2-methyl-1propanesulfonic Acid 27119-07-9 (85) Water 7732-18-5 (15)

| Carcinogen Status: | |
|--------------------------|--|
| No information available | |
| No information available | |

Target Organs: No information available

Teratogenic Effects: No information available

Mutagenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|---|------------|----------|
| Poly(2-acrylamido-2-methyl-1-propanesulfonic Acid | 27119-07-9 | 85 |
| Water | 7732-18-5 | 15 |

4. FIRST AID MEASURES

Product code: P1698

General Advice: Poison information centres in each State capital city can provide additional

assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact: Wash off immediately with soap and plenty of water. Remove all contaminated

clothes and shoes. Continue flushing with plenty of water for at least 15 minutes.

Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eye with water for 15 minutes. Immediate medical attention is required. Call a

physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial

respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Immediate medical attention is required. Call a physician or

Poison Control Centre immediately.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

| Flashpoint (°C/°F): | No information available. |
|---------------------|---------------------------|
| | |

Tested according to:

Product code: P1698

Not applicable

| Lower Explosion Limit (%): | No information available |
|----------------------------|--------------------------|
| Upper Explosion Limit (%): | No information available |

Autoignition Temperature (°C/°F): Not applicable.

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire,

extinguish the fire using an agent suitable for the type of

surrounding fire.

Unsuitable Extinguishing Media: No information available.

Hazardous Combustion Products: Not applicable

Specific hazards: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

Specific Methods: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions:

Do not let product enter drains.

Methods for Cleaning Up:

Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Products:

Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Provide exhaust ventilation or other engineering controls to

keep the airborne concentrations of vapors and mist below

their respective threshold limit value.

Personal Protective Equipment

Eye protection: Face-shield.

Skin and body protection: Chemical resistant protective suit. Gloves. boots.

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and

immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

Product code: P1698

| Officed States | | | | |
|----------------|------|-------|-------|------------|
| Components | OSHA | NIOSH | ACGIH | AIHA WHEEL |

| ſ | | None | None | None | None |
|---|-----------------------------------|------|------|------|------|
| | Poly(2-acrylamido-2-methyl-1- | | | | |
| | propanesulfonic Acid - 27119-07-9 | | | | |
| Ī | | None | None | None | None |
| | Water - 7732-18-5 | | | | |

Canada

| Components | Alberta | British Columbia | Ontario | Quebec |
|-------------------------------|---------|------------------|---------|--------|
| Poly(2-acrylamido-2-methyl-1- | None | None | None | None |
| propanesulfonic Acid | | | | |
| 27119-07-9 | | | | |
| Water | None | None | None | None |
| 7732-18-5 | | | | |

Australia and Mexico

| Components | Australia | Mexico |
|-------------------------------|-----------|--------|
| Poly(2-acrylamido-2-methyl-1- | None | None |
| propanesulfonic Acid | | |
| 27119-07-9 | | |
| Water | None | None |
| 7732-18-5 | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Appearance:Color:Liquid.Viscous.Colorless.

Odor:TasteMolecular/Formula weight:No information availableNo information availableNo information available

Flash point (°C): Lower Explosion Limit (%): Upper Explosion Limit (%):

Not applicable Not applicable Not applicable

Autoignition Temperature (°C/°F): pH: Melting point/range(°C/°F): No information available 1-3 No information available

Boiling point/range(°C/°F): Decomposition temperature(°C/°F): Specific gravity:

No information available
No information available
No information available

Density (g/cm3): Vapor pressure @ 20°C (kPa):

0.99-1.01 No information available No information available

Evaporation rate:No information available

Vapor density:

VoC content (g/L):

No information available

No information available

Odor threshold (ppm): Partition coefficient Miscibility:

No information available (n-octanol/water): No information available

No information available

Solubility: Soluble in Water

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

Conditions to avoid: Incompatible materials.

Materials to avoid: Oxidising agents (strong).

Product code: P1698

Product name: Poly(2-acrylamido-2-methyl-1-propanesulfonic Acid 15% Sollution in Water

Hazardous decomposition

products:

No information available.

Possibility of Hazardous

Reactions:

No information available

Polymerization: Hazardous polymerisation does not occur

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Poly(2-acrylamido-2-methyl-1-propanesulfonic Acid - 27119-07-9

LD50/oral/rat = No information available

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information =

No information available

Water - 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information =

No information available

Product Information

LC50/inhalation/rat = No information available

LC50/Inhalation/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LD50/oral/mouse = No information available

LD50/oral/rat = No information available

Local Effects

Product code: P1698

Skin irritation: May cause skin irritation.

Eye irritation: Contact with eyes may cause irritation.

Inhalation: May cause irritation of respiratory tract.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Product name: Poly(2-acrylamido-2-methyl-1-propanesulfonic Acid 15%

Sollution in Water

Sensitization: No information available

Chronic Toxicity

Chronic Toxicity No information available

Carcinogenic effects: Not considered carcinogenic

| Components | NTP | IARC | OSHA HCS - Carcinogens | ACGIH - Carcinogens | Australia - Prohibited Carcinogenic Substances | Australia - Notifiable Carcinogenic Substances |
|--|------------|------------|---------------------------|---------------------|--|--|
| Poly(2-acrylamido-2- methyl-1-propanesulfonic Acid | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |
| Water | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects: No information available

Reproductive Effects: No information available

Teratogenic Effects: No information available

Target Organs: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: Information given is based on data on the components and

the ecotoxicology of similar products

Ecotoxicity effects: Aquatic environment.

Aquatic toxicity:

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Components | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|-------------------------------|------------------------|-------------------------------|------------------------|------------------------|
| Poly(2-acrylamido-2-methyl-1- | None | None | None | None |
| propanesulfonic Acid | | | | |
| Water | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

7 / 11

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(Poly(2-acrylamido-2-methyl-1-propanesulfonic

acid)

Hazard Class: 8
Packing Group: |||

Subsidiary Risk: Not applicable
Marine Pollutant No data available

ERG No: 153

DOT RQ (lbs):No information available

Symbol(s): G

TDG (Canada)

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: III

Subsidiary Risk:No information availableDescription:No information available

ADR

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: |||

Subsidiary Risk:
Classification Code:
Description:
No information available
No information available
No information available
No information available

IMO / IMDG

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: |||

Subsidiary Risk:No information availableDescription:No information availableIMDG Page:No information availableMarine PollutantNo information available

EMS: F-A

MFAG: No information available Maximum Quantity: No information available

RID

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: III
Subsidiary Risk: 8

Classification Code: No information available Description: No information available

ICAO

Product code: P1698

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: III

Subsidiary Risk: No information available

Description: No information available

IATA

UN-No: UN3265

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

Hazard Class: 8
Packing Group: III

Subsidiary Risk: No information available

ERG Code: 8L

Description: No information available

15. REGULATORY INFORMATION

International Inventories

| Components | U.S. TSCA | Philippines (PICCS) | KOREA KECL | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|---|-----------|---------------------|-------------|-------------|---------|---------------------|-------------|
| Poly(2-acrylamido-2-methyl-1- propanesulfonic Acid | XU | Not present | Not present | Not present | Present | Present | Not present |
| Water | Present | Present | KE-35400 | Not present | Present | Present | 231-791-2 |

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcment Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components | Carcinogen | Developmental Toxicity | Male Reproductive | Female Reproductive |
|---|------------|------------------------|-------------------|---------------------|
| | | | Toxicity | Toxicity: |
| Poly(2-acrylamido-2-methyl-1- propanesulfonic Acid | Not Listed | Not Listed | Not Listed | Not Listed |
| Water | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| · | Substances and their | | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|--|----------------------|------|--|------------------------------------|------------------------------------|
| Poly(2-acrylamido-2- methyl-1-propanesulfonic Acid | | None | None | None | None |
| Water | None | None | None | None | None |

U.S. TSCA

| • | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|---|--|--|
| Poly(2-acrylamido-2-methyl-1- propanesulfonic Acid | Not Applicable | Not Applicable |
| Water | Not Applicable | Not Applicable |

Canada

Product code: P1698

Product name: Poly(2-acrylamido-2methyl-1-propanesulfonic Acid 15% Sollution in Water

WHMIS hazard class:

E Corrosive material

Water

Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

| Components | Canada (DSL) | Canada (NDSL) |
|-------------------------------|--------------|---------------|
| Poly(2-acrylamido-2-methyl-1- | Present | Not Listed |
| propanesulfonic Acid | | |
| Water | Present | Not Listed |

| Components | CEPA Schedule I - Toxic Substances | CEPA - 2010 Greenhouse Gases Subject to Manditory |
|---|------------------------------------|---|
| | | Reporting |
| Poly(2-acrylamido-2-methyl-1- propanesulfonic Acid | Not listed | Not listed |
| Water | Not listed | Not listed |

EU Classification

R-phrase(s)

R34 - Causes burns.

S -phrase(s)

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive.



16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date 02-May-2012

Reason for revision: Not applicable

Prepared by: Sonia Owen

Sollution in Water

Literature reference: No information available

Product code: P1698

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

Product name: Poly(2-acrylamido-2methyl-1-propanesulfonic Acid 15% Sollution in Water