



Health	1
Fire	0
Reactivity	0
Personal Protection	B

Material Safety Data Sheet

Page, 8% Solution MSDS

Section 1: Chemical Product and Company Identification

Product Name: Page, 8% Solution

Catalog Codes: SLP5290

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Acrylamide; Urea; Boric acid; Tromethamine; N,N'-methylenebisacrylamide; Water

CI#: Not applicable.

Synonym: Polyacrylamide Gell Electrophoresis

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

Contact Information:

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14025 Smith Rd.

Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Acrylamide	79-06-1	3.8-7.8
Urea	57-13-6	<1
		<1
Boric acid	10043-35-3	
Tromethamine	77-86-1	<1
{N,N'}methylenebisacrylamide	110-26-9	0.2-0.4
Water	7732-18-5	<97

Toxicological Data on Ingredients: Acrylamide: ORAL (LD50): Acute: 124 mg/kg [Rat.], 107 mg/kg [Mouse], 150 mg/kg [Rabbit]. DERMAL (LD50): Acute: 400 mg/kg [Rat], 1680 mg/kg [Rabbit]. Urea: ORAL (LD50): Acute: 8471 mg/kg [Rat], 11000 mg/kg [Mouse]. Boric acid: ORAL (LD50): Acute: 2660 mg/kg [Rat], 3450 mg/kg [Mouse]. Tromethamine: ORAL (LD50): Acute: 5900 mg/kg [Rat]. N,N'-methylenebisacrylamide: ORAL (LD50): Acute: 390 mg/kg [Rat], 380 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion. Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA+ (Proven.) by NIOSH [Acrylamide]. Classified A3 (Proven for animal.) by ACGIH [Acrylamide]. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP, 2 (Suspected for human.) by European Union [Acrylamide]. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. [Acrylamide]. Mutagenic for bacteria and/or yeast. [Acrylamide]. Mutagenic for mammalian somatic cells. [Urea]. Mutagenic for bacteria and/or yeast. [Boric acid]. Mutagenic for bacteria and/or yeast. [N,N'-methylenebisacrylamide]. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/male [POSSIBLE] [Acrylamide]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Boric acid]. The substance may be toxic to blood, kidneys, the nervous system, liver, peripheral nervous system, cardiovascular system, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact: Not available.

Inhalation:

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

Serious Inhalation: Not available.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of static discharge: Not available. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not Available

Section 6: Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Poisonous liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Refrigerate

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection: Safety glasses. Lab coat. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Acrylamide TWA: 0.03 (mg/m³) [Australia] Inhalation TWA: 0.3 (mg/m³) from OSHA (PEL) [United States] Inhalation TWA: 0.03 (mg/m³) from NIOSH Inhalation TWA: 0.03 (mg/m³) from NIOSH SKIN TWA: 0.3 (mg/m³) [United Kingdom (UK)] Inhalation TWA: 0.03 (mg/m³) from ACGIH (TLV) [United States] [1999] Inhalation³ Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Characteristic. (Slight.)

Taste: Not available.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Not available

Boiling Point: The lowest known value is 100°C (212°F) (Water).

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Weighted average: 1.01 (Water = 1)

Vapor Pressure: The highest known value is 2.3 kPa (@ 20°C) (Water).

Vapor Density: The highest known value is 0.62 (Air = 1) (Water).

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, acetone.

Solubility:

Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Light Sensitive. May polymerize on exposure to light. The solid is stable at room temperature but may polymerize violently on melting or when heated above 50 C. Reacts spontaneously with hydroxyl-, amino-, and sulfhydryl- containing compounds. Reacts vigorously with acids, bases producing ammonia salts and acrylic acid. Spontaneous polymerization does not readily occur, but requires the presence of dimethylaminopropionitrile (DMAPN) catalyst and ammonium persulfate. Also, Acrylamide may polymerize upon contact with oxidizing materials e.g. peroxides.. (Acrylamide)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals:

Acute oral toxicity (LD50): 107 mg/kg [Mouse]. (Acrylamide). Acute dermal toxicity (LD50): 400 mg/kg [Rat]. (Acrylamide).

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA+ (Proven.) by NIOSH [Acrylamide]. Classified A3 (Proven for animal.) by ACGIH [Acrylamide]. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP, 2 (Suspected for human.) by European Union [Acrylamide]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Acrylamide]. Mutagenic for bacteria and/or yeast. [Acrylamide]. Mutagenic for mammalian somatic cells. [Urea]. Mutagenic for bacteria and/or yeast. [Boric acid]. Mutagenic for bacteria and/or yeast. [N,N'-methylenebisacrylamide]. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/male [POSSIBLE] [Acrylamide]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Boric acid]. Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, peripheral nervous system, cardiovascular system, skin, central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

Crosses placental barrier, occurs in breast milk. Accumulates temporarily, but most is broken down within a day. May affect genetic material. May also have tumorigenic effects based on animal studies. May cause adverse reproductive effects (fetotoxicity and male fertility) and birth defects (teratogenic). (Acrylamide)

Special Remarks on other Toxic Effects on Humans:

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Acrylamide California prop. 65 (no significant risk level): Acrylamide California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Acrylamide New York release reporting list: Acrylamide Rhode Island RTK hazardous substances: Acrylamide Pennsylvania RTK: Acrylamide Florida: Acrylamide Minnesota: Urea Massachusetts RTK: Acrylamide New Jersey: Acrylamide TSCA 8(b) inventory: Acrylamide; Urea; Boric acid; Tromethamine; N,N'-methylenebisacrylamide; Water TSCA 8(d) H and S data reporting: Acrylamide: 10/4/82; Sunset Date: 10/4/92 TSCA 12(b) annual export notification: Acrylamide SARA 302/304/311/312 extremely hazardous substances: Acrylamide SARA 313 toxic chemical notification and release reporting: Acrylamide 5.8% CERCLA: Hazardous substances.: Acrylamide: 5000 lbs. (2268 kg);

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

Not available S24/25- Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: b

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 1

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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