

MATERIAL SAFETY DATA SHEET

Company ELPIS-Biotech. Inc.

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SECTION 1. CHEMICAL INFORMATION

Product name Reversible Membrane Staining Solution

Cat. No. EBP-1032

Volume of product package: 1 L

Product Use: Laboratory Reagent. For R&D use only. Not for drug, household or other uses.

Manufacturer/ Supplier information

Supply company: ELPIS-Biotech. Inc.

Address: 123-12 Jeonglim-dong, Seo-gu, Daejeon, Korea

Information service or emergency call: +82-42-581-8448 (042-581-8448, Korea)

Department in charge: Research Department

SECTION 2. HAZARDOUS IDENTIFICATION

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

Potential Chronic Health Effects:

Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation. Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available. Developmental toxicity: Not available.

Toxicological Data on Ingredients: Ponceau S LD50: Not available. LC50: Not available.

Toxicological Data on Ingredients: Acetic acid: ORAL (LD50): Acute: 3310 mg/kg [Rat]. 4960 mg/kg [Mouse]. 3530 mg/kg [Rat]. DERMAL (LD50): Acute: 1060 mg/kg [Rabbit]. VAPOR (LC50): Acute: 5620 ppm 1 hours [Mouse].

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Buffer's Components in Water:

Reagent	CAS#	Concentration, %
Ponceau S	6226-79-5	< 0.1
Acetic acid (glacial)	64-19-7	< 0.1
Deionized water	7732-18-5	>90

SECTION 4. FIRST AID MEASURES

After skin contact

Wash skin with water and soap and rinse thoroughly. Remove contaminated clothing. Get medical attention if irritating occurs.

After eye contact

Rinse opened eyes for several minutes under running water. Get medical attention if eyes become irritating.

After swallowing (ingestion)

Rinse mouth. Drink plenty of water. Get medical attention if irritating or symptoms occur

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing media

Water spray. Carbon dioxide, dry chemical powder or appopriate foam.

Special firefighting procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosions hazards

Emit toxic fumes undrer fire conditions

Fire Hazards in Presence of Various Substances: Not available.

Prevent contact with skin and eyes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Not required.

Environmental precautions

Do not allow entering sewers, surfaces or ground water.

Measures for cleaning / collecting

Collect spilled liquid with liquid-binding material or inert absorbent and place it in container for disposal. Wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Handling

No special measures necessary. Good laboratory technique should be used when handling.

Storage

No special measures necessary. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits Eye protection Skin protection

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Hygiene measures Breathing equipment

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Liquid.
Color Pink

Odor Pungent, vinegar-like, sour

Flash point > 392 F, > 200° C

Explosive properties No data available.

Vapor pressure < 1 MMHG @ 20°C

SECTION 10. STABILITY AND REACTIVITY

Stability Stable.

Hazardous polymerization Will not occur

Materials to Avoid Strong oxidizing agents, strong bases.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide

Protect from heat

SECTION 11. TOXICOLOGICAL INFORMATION

Eye Contact: Irritating to eyes
Skin Contact Irritating to skin.

Multiple Routes May be harmful by inhalation, ingestion, or skin absorption

Materials may be irritating to mucous membranes and upper respiratory tract.

Preparations may cause allergic reactions in certain sensitive individuals.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12. ECOLOGICAL INFORMATION

Data not yet avaliable

SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material.

Observe all federal, state and local environmental regulations

Dissolve or mix the material with a combustable solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14. TRANSPORT INFORMATION

Contact ELPIS Biotech, Inc. Company for Transportation Information.

SECTION 15. REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Ponceau S

Other Regulations: Not available.

Other Classifications:

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

DSCL (EEC): R36- Irritating to eyes.

HMIS (U.S.A.): Health Hazard: 2 Fire Hazard: 1 Reactivity: 0

Personal Protection: E

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

Health: 2

Flammability: 1 Reactivity: 0 Specific hazard:

SECTION 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall beused only as a guide.

ELPIS Biotech Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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