

MATERIAL SAFETY DATA SHEET

Company ELPIS-Biotech. Inc.

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SECTION 1. CHEMICAL INFORMATION

Product name Gradi-Gel II Gradient PAGE Analysis Kit

Cat. No. EBA-1056

30% Acrylamide Stock Solution (acrylamide:bisacrylamide = 29:1) Volume of product package

100ml.

Gradi-Gel II 2x Stacking Gel Buffer: Volume of product package 20ml. Gradi-Gel II 2x Running Gel Buffer: Volume of product package 100ml.

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





Label precautionary statement

Very toxic in contact with skin and if swallowed.

May cause cancer.

Danger of serious damage to health by prolonged exposure.

Wear suitable protective clothing, gloves and eye/face protection

Emergency overview

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing

Accute health effects(Eye, Skin, Ingestion, Inhalation, Chronic)

Very toxic in contact with skin and if swallowed.

May cause cancer.

Danger of serious damage to health by prolonged exposure.

Wear suitable protective clothing, gloves and eye/face protect

Precautionnary guidelines

Wear suitable protective clothing, gloves and eye/face when handling to avoid contact

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Product's Components in Water:

Reagent	CAS#	Concentration, %
Acrylamide	[79-06-1]	≤ 29
N,N´ Methylene bisacrylamide	[110-26-9]	≤ 1

SECTION 4. FIRST AID MEASURES

General measures

Remove contaminated clothing promptly.

Allow the victim to rest in a well ventilated area, Seek medical attention

Emergency first measures (Eyes, Skin, Ingestion, Inhalation...)

In case of skin contact, wash thoroughly

In case of eye contact, rinse immediately 15min by separating eyelids, and seek for medical advice If inhaled, remove victim to fresh air. If difficult breathing, give oxygen and obtain medical attention. If not breathing, give artificial respiration.

If ingested, do NOT induce vomiting, If conscious and alert, rinse mouth, drink plenty of water, and seek for medical advice.

Notes to physicians

Treat symptomatically

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. Container explosion may occur.

Spills and Leaks

Sweep up or vacuum material and place into a suitable disposal container

Prevent contact with skin and eyes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General information

Wear a proper personal protective equipment to avoid skin and eye exposure: wear respirator, rubber boots, chemical resistant gloves. chemical safety goggles

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

Wear a proper personal protective equipment to avoid skin and eye exposure

Storage

Storage in a cool dry place, keep tightly closed. Store at 4 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection (eyes, hands, body, respiratory...)

For normal use, rubber gloves usually sufficient when handled properly. Wear protective clothing (laboratory suit, safety goggles) to prevent skin contact. Wash or discard contaminated clothes if reused.

Safety shower and eye bath.

Compatible chemical-resistant gloves.

Wear a NIOSH/MSHA or European Standard EN 149 approved full-face piece airline respirator in the positive pressure mode with emergency escape provisions

Do not breathe vapor. Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling. Keep tighly closed, store in a cool place.

Exposure limits

Consult local authorities

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

AppearanceLiquid.ColorClearOdorOdorless.Boilin Point98 - 104 °C

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 May occur. Avoid temperatures above 50°C.

Materials to Avoid Strong oxidizing agents and high temperatures. Light sensitive.

Hazardous Decomposition Thermal decomposition may produce CO2 and CO and nitrogen

Products:

oxides.

Protect from heat

SECTION 11. TOXICOLOGICAL INFORMATION

Harmful by inhalation, ingestion, or skin absorption.

Acute effects May cause eye and skin irritation.

May cause nervous system disturbances.

Chronic effects Carcinogen

(carcinogenicity, May alter genetic material. overexposure may cause

teratogenicity, reproductive

reproductive Disorders based on tests with laboratory animals.

toxicity, To the best of our knowledge, the chemical, physical, and mutagenesis) Toxicological properties have not been thoroughly investigated

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

classified as a poison, IATA I.D. No. UN 2810 - class 6.1 - packing group II

European labeling in accordance with EC directives

Very toxic

Risk phrases: R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed

R45 may cause cancer

R40 Possible risk of irreversible effects

Safety phrases: S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

SECTION 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used 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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