



MATERIAL SAFETY DATA SHEET

Document No.: 3200-015KJ1

1907/2006/EC (REACH) and 1272/2008/EC (CLP/GHS)

1. Product and Company Identification

Product name: PT Liver 9V

Product code: IVR-PT03V

Recommended uses:

The PT Liver 9V, used with the PT10V Analyzer, is intended to be used for the in vitro quantitative determination of glucose (GLU), blood urea nitrogen (BUN), total protein (TP), albumin (ALB), globulin (GLOB), albumin/globulin (A/G) ratio, alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP), gamma-glutamyl transpeptidase (GGT) and total bilirubin (TBIL) in the plasma and serum of canine, feline and equine. The globulin (GLOB), albumin/globulin (A/G) ratio are calculated in this test.

Company Information

Manufacturer

SAMSUNG ELECTRONICS CO., LTD.

129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea

Distributor

2. Hazards identification

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS):

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

This product is not classified as dangerous according to Directive 67/548/EEC.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

Human health hazards: Danger symbol not required.

Safety hazards: Danger symbol not required.

Environmental hazards: Danger symbol not required.

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP/GHS Regulation

2.3 Other hazards – none

3. Composition / information on ingredients

Name	Reagent	Amounts
GLU	Glucose dehydrogenase	80 - 90 mU
BUN	Urease	650 - 750 mU
	Bromocresol green	1.0 - 2.0 ug
T P	Copper(II) sulfate	20 - 30 ug
ALB	Bromocresol green	1.0 - 1.5 ug
ALT	L-alanine	2.0 - 3.0 ug
AST	Sodium L (+)-aspartate	3 - 4 ug
ALP	AMPD	20 - 30 ug
	pNPP	2.5 - 3.5 ug
GGT	Glycylglycine	250 - 350 mM
	γ -GCN	2.0 - 3.0 ug
TBIL	Bilirubin oxidase	80 - 90 mU

4. First aid measures

Description of first aid measures

General advice

Never give anything by mouth to an unconscious person, or never induce vomiting.

In case of inhalation

Remove to fresh air. Get medical attention.

In case of skin contact

Wash area with copious amounts of water for 15 minutes. If symptoms persist, consult a physician.

In case of eye contact

Flush eyes with cold water for 15 minutes. Get medical attention.

In case of ingestion

DO NOT INDUCE VOMITING. Give large quantities of water. Get medical attention.

5. Fire hazard / fire-fighting measures

5.1 Fire hazard

Non combustible.

5.2 Suitable extinguishing media

Extinguish with water spray, dry powder, or foam.

5.3 Unsuitable extinguishing media

Not known.

5.4 Hazardous decomposition products

May result in the formation of carbon dioxides.

5.5 Special protective equipment

Wear self-contained breathing apparatus, pressure demand, NIOSH approved and full protective gear.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Eye Protection: Wear safety goggles or a face shield when cleaning up spills

Skin Protection: Wear protective attire that prevents contamination of skin and personal clothing

Hand Protection: Wear vinyl gloves that cover exposed skin

Other Protections: Avoid breathing mists, dusts, and aerosols

6.2 Environmental precautions

Prevent spilled product from contacting soil, waterways, drains.

6.3 Methods and materials for containment and cleaning up

Contain the material to prevent it from becoming airborne

Place absorbent material on top of, and around the perimeter of the spill

Sweep up the spilled material and decontaminate the area with soap and water or an equivalent cleaner.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Follow safe chemical handling procedures for handling and storage.

Avoid contact with skin and eyes. Wear gloves when handling the product.

Information about protection against explosions and fires

No special requirements.

Technical measures

None determined.

7.2 Conditions for safe storage

Requirements to be met by storerooms and containers

Store between the following temperatures: 2 to 8°C (35,6 to 46,4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight.

Information about storage in one common storage facility

Store away from reducing agents and acids.

Storage conditions

Keep in closed, original container.

Protect from freeze and direct sunshine.

Incompatible materials

Not determined.

Packaging materials

Not determined.

7.3 Specific application

See product insert.

8. Exposure controls / personal protection

8.1 Engineering control measure

Use general room ventilation where this product is handled.

8.2 Exposure limits

None of the chemicals in this preparation are assigned occupational exposure limits. This product can be safely handled under normal conditions with no controls.

8.3 Personal protection

Safety glasses and chemical-resistant gloves recommended.

Respiratory protection: Not required.

Hand protection: Use of protective gloves is recommended.

Eye protection: Safety glasses recommended during refilling.

Skin protection: Protective clothing, general (lab coat).

8.4 General protective measures / hygiene

Avoid prolonged contact with skin and eye, swallowing the product.

Ensure washing facilities (warm water) after working hours and before breaks. Wash thoroughly hands after using the product.

8.5 Environmental exposure controls

Do not discharge into drains/surface waters/groundwater.

9. Physical and chemical properties

Appearance:

Physical state: Solid. Solid reagents are enclosed in a sealed PET film cartridge.

Color: Multi-colored dry reagents
Odor: Odorless
Odor threshold: Not available

Chemical Properties:

Melting point: Not available
Boiling point: Not available
pH: Not available
Flash point (COC): Not available
Ignition temperature: Not available
Auto-ignition: Not available
Explosive properties: Not explosive
Vapor pressure at 20°C: Not available
Density at 20°C: Not available
Solubility in water: Not available

10. Stability and reactivity

Chemical Stability: No decomposition if handled and stored properly.
Conditions to avoid: Excess heat or flame.
Materials to avoid: Not known. No dangerous reaction.
Hazardous decomposition products: None under normal storage and use conditions.

11. Toxicological information

The toxicological properties have not been fully investigated.

Acute toxicity: Not available as the mixture.

Oral:
Dermal:
Inhalation:

Acute toxicity: Not available as the mixture.

Skin:
Eyes:

Sensitization: Not available as the mixture.

Chronic toxicity: Not known

Other information, specific effects:

Carcinogen effect: Not known
Mutagen effect: Not known
Reproduction-damaging effect: Not known

Note: When used and handled according to specifications, the product does not have any harmful

effects according to our experience and the information provided to you.

12. Ecological information

Mobility in soil: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: No data available

Ecotoxicity: No data available

Aquatic organisms:

Soil organisms:

Plants:

Biological oxygen demand:

Chemical oxygen demand:

13. Disposal considerations

Product disposal

Dispose of used cartridges as biohazardous waste in accordance with all federal, state, and local regulations. Any disposal practice must be in complicated with federal, state, and local regulations.

Packaging disposal

Containers with product residue should also be treated according to national and local regulations.

14. Transport information

14.1 UN number

Not regulated.

14.2 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.3 Transport IMDG

The product is not subject to IMDG regulations.

14.4 Transport ICAO-TI / IATA

Not regulated as a dangerous good.

14.5 Other information

No data available.

14.6 Special precautions for user

No data available.

15. Regulatory information

This safety datasheet complies with the requirements of Regulation No. 1907/2006/EC and 1272/2008/EC (CLP/GHS).

15.1 Danger symbol(s) and indication(s)

Not required

15.2 Hazardous components

Not required

16. Other information

Recommended applications / restrictions: See product insert.

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Revision comments: New MSDS form

Version: 3.0

The above information believed to be correct but does not purport to be inclusive and shall be used only as a guide. Samsung Electronics shall not be held liable for any damage resulting from handling or from contact with the above product.