



Material Safety Data Sheet

Manufacturer: PZ CORMAY S.A.
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Date of card issue: 14.02.2004
Date of card update: 10.09.2007

I. Identification of the preparation.

CORMAY GEL PROTEIN 100 (catalogue N° 6-048)

CORMAY GEL PROTEIN 100 the sets are designed for Health Service laboratories, is designed for electrophoretic separation of serum proteins on agarose.

II. Kit contents.

CORMAY GEL PROTEIN 100

GEL	: Agarose gel containing no chemicals in quantities as to be considered toxic or hazardous.
Tris-Barbital Buffer	: T R 22-42/43-61 S 1, 36/37/39
Amidoblack	: C R 34 S 23-26
Destaining Solution	: Not toxic.

Data contained in this data sheet is based on information available at the date of issue. This information cannot be considered as exhaustive and will in no case relieve product users to obtain information from other sources in order to ensure for correct use of the product and staff safety. CORMAY cannot be held liable to any damage resulting from use or from contact with the product described in this data sheet.



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1. Identification of the preparation.

CORMAY GEL PROTEIN 100 (catalogue N° 6-048)
TRIS-BARBITAL BUFFER

The sets CORMAY GEL PROTEIN 100 are designed for Health Service laboratories, for electrophoretic separation of serum proteins on agarose.

2. Hazards Identification.

Toxic
Harmful if swallowed.
May cause sensitization by inhalation and skin contact.
May cause harm to the unborn child.

3. Composition / information on components.

Dangerous components:	
5,5-diethylbarbituric acid	Concentration range: 0,5 – 1,3%
CAS number: 57-44-3	
EC number: 200-331-2	
Index number -	Harmfulness: T; Phrases: R 22-42/43-61; S 3/7/9-22-36/37/39-45-53
5,5-diethylbarbituric acid sodium	Concentration range: 3 – 6%
CAS number: 144-02-5	
EC number: 205-613-9	
Index number -	Harmfulness: T; Phrases: R 22-42/43-61; S 3/7/9-22-36/37/39-45-53

sodium azide

Concentration range: 0,5- 0,12%

CAS number: 26628-22-8

EC number: 247-852-1;

Index number: 011-004-00-7

Harmfulness: T+;N; Phrases: R 28-32-50/53; S 28-45-53-60-61

4. First-Aid Measures.**After exposure by respiratory passages:** fresh air. Call in physician.**After skin contamination:** wash off with plenty of water. Take off the contaminated clothing.**After contamination of eyes:** Immediately wash with water or with a 0,9% sodium chloride solution for at least 15 minutes, taking care to keep eyelids open with your fingers for efficient rinsing. If irritation persists, seek medical advice from an ophthalmologist.**After consumption:** give the sufferer a large amount of water to drink.

If the sufferer feels unwell, consult a doctor.

5. Fire Fighting Measures:**Suitable extinguishing media:**

- water, powder, foam

Special risks:

Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental Release Measures:**Preventive measures related to the staff:**

Avoid contamination with the preparation. Avoid contact with skin and eyes.

Cleaning /absorption procedures :

In case of spillage on floor or working tables, wipe out with inert absorbent material.

Rinse with large amount of water if necessary.

7. Handling and Storage:**Dealing with the substance**

In accordance with the norms generally accepted for chemicals in laboratories.

While working with the preparation, one should use appropriate means of personal protection (see pt. 8)

Avoid contact of the preparation with skin and eyes, as well as inhaling its mists

Secure efficient local ventilation

You must not have meals, drink, or smoke tobacco while working with the preparation, except in places

Designed for that purpose

Storage:

Hermetically closed. In temperature from +15°C do +25°C.

8. Exposure Controls/ Personal Protection:**Appropriate control parameter:**

See Polish regulations.

Nitrogen oxides: NDS – 5 mg/m³, NDSCh – 10 mg/m³.

sodium azide: NDS – 0,1 mg/m³, NDSC_h – 0,3 mg/m³.

Risk of skin absorption.

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory passages: Apply in rooms with efficiently working ventilation, avoid inhaling product mists, use respiratory tract-protective agents

Eyes: avoid direct contact of the product with eyes use glasses.

Hands: avoid direct contact of the product with skin, immediately take off clothes soiled with the preparation and wash contaminated skin with soapy water, use personal protective, clothing and protective gloves:

In full contact:

Glove material: nitrile rubber

Layer thickness: 0,11 mm

Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber

Layer thickness: 0,11 mm

Breakthrough time: > 480 Min.

Industrial hygiene: you must not have meals, drink, or smoke tobacco while working with the preparation, except in places designed for that purpose. Wash your hands after work with the substance carefully with soapy water. Apply skin-protective barrier cream.

Breakthrough time: > 480 Min.

Breakthrough time: > 480 Min.

Industrial hygiene: you must not have meals, drink, or smoke tobacco while working with the preparation, except in places designed for that purpose. Wash your hands after work with the substance carefully with soapy water. Apply skin-protective barrier cream.

9. Physical and Chemical Properties.

Form:	clear
Colour:	colourless
Odour:	odourless
Vapour pressure:	no data available
Boiling temperature:	100°C
Melting temperature:	no data available
Ignition temperature:	incombustible
Flammability:	incombustible
Density:	-
pH:	9,5 (20-25 °C)

10. Stability and Reactivity:

Conditions that should be avoided:

Excessive heating.

Substances that should be avoided:

Acids, strong oxidants, heavy metals and their salts, certain organic chlorides..

Dangerous decomposition products:

By decomposition in presence of acids: Nitrogen oxides.

In presence of heavy metals: Release of explosive nitrides.

By thermal decomposition after desiccating: Irritating and toxic gases.

Further information:

This products should be handled with particular care.

11. Toxicological Information:

Acute effects:

- Toxic in case of ingestion
- May induce irritations
- May induce allergic reactions.

Chronic effects:

- Risk of noxious effects on the embryo or fetus during pregnancy.
- Appearance of mutagenic properties in certain cases.

Target organs:

- Central nervous system.
- Heart.
- Thyroid.
- Kidneys

Lethal doses and concentrations for animals:

Undetermined but, by conventional calculation:

LD₅₀ (oral, rat) – above 2000 mg/kg

12. Ecological Information:

Biologic degradation:

Biodegradable and not bioaccumulable.

Ecotoxic effects:

In large quantity, the product is toxic for aquatic environments.

Further ecological data:

Do not allow for penetration into waters, sewage, or soil..

13. Disposal Considerations:

Product:

Avoid discharging into sewers. Keep waste in closed containers provided for this purpose. We recommend contacting the appropriate authorities, or waste disposal enterprises that will advise you on how to dispose of special waste.

Packing:

Remove in accordance with official regulations. Treat contaminated packages in the same way as the substance itself. The empty bottles must be properly disposed of by an authorized agency. Destruction by incineration with combustion gas cleaning under conditions allowed by applicable regulations.

14. Transportation Information:

The product is not subject to transport regulations.

15. Regulatory Information:

Material Safety Data Sheet was prepared in accordance with:

The EC Directive Nr UE2001/58/WE, the EC Directive Nr 1999/45/EG, the EC Directive 67/548 EEC, EC Directive 88/379/EEC or the EC Directive 91/155/EEC (Dangerous Product Regulations incl. EC Guidelines). Regulation (EC) No 1907/2006 of European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (attachment II)
See Polish regulations.

Marking:



Toxic

Contains sodium azide.

T – Toxic

Risk phrases (R):

R 22-42/43-61 – Harmful if swallowed. May cause sensitization by inhalation and skin contact. May cause harm to the unborn child.

Safety phrases (S):

S 1-36/37/39– Keep locked up. Wear suitable protective clothing, gloves and eye/face protection.

16. Other Information.

R 22– Harmful if swallowed.

R 42/43 - May cause sensitization by inhalation and skin contact.

R 61 - May cause harm to the unborn child.

The foregoing information is based on the present state of our knowledge. It characterizes the product with respect to the appropriate safety measures. They do not guarantee the properties of the product.

We do not take responsibility for damage and losses that may result from inappropriate use of the preparation.

Reason of changes:

It's changes in point 2.

The foregoing safety chart prepared in electronic version is legally valid without sign manual.



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1. Identification of the preparation.

CORMAY GEL PROTEIN 100 (catalogue N° 6-048)
AMIDOBBLACK

CORMAY GEL PROTEIN 100 the sets are designed for Health Service laboratories, is designed for electrophoretic separation of serum proteins on agarose.

2. Hazards Identification.

Corrosive
Causes burns.

3. Composition / information on components.

Dangerous components:

acetic acid		Contains: 10-35%
CAS number:	64-19-7	
EC number:	200-580-7	
Index number:	607-002-00-6	Harmfulness: C; Phrases: R: R 10-35; S: 23-26-45-53

4. First-Aid Measures.

After exposure by respiratory passages: fresh air. Call in physician.
After skin contamination: wash off with plenty of water. Dab with polyethylene glycol 400.
Take off the contaminated clothing.
After contamination of eyes: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.
After consumption: give the sufferer a large amount of water to drink.
Avoid vomiting. (risk of perforation!)
If the sufferer feels unwell, consult a doctor.

5. Fire Fighting Measures:

Suitable extinguishing media:
- water, powder, foam
Special risks:
Vapours heavier than air. Formation of explosive mixtures possible with air. Development of hazardous combustion gases or vapours acetic acid possible in the event of fire.
Special protective equipment for fire fighting:
Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
Other information:
Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental Release Measures:

Person-related precautionary measures:
Do not inhale vapours/ aerosols. Avoid contamination with the preparation. Ensure supply of fresh air in enclosed rooms.
Procedures for cleaning /absorption :
In case of spillage neutralize with lime or sodium carbonate.
Collect small quantities with the use of an absorbing agent, rinse with large amount of water if necessary.

7. Handling and Storage:

Procedures:
While working with the preparation, one should use appropriate means of personal protection (see pt. 8)
Avoid contact of the preparation with skin and eyes.
Storage:
Hermetically closed. In temperature from +15°C do +25°C.
No metal containers.
Accessible only for authorized persons.

8. Exposure Controls/ Personal Protection:

Appropriate control parameter:
See Polish regulations.
acetic acid: NDS – 15 mg/m³, NDSC – 30 mg/m³.

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory passages: Apply in rooms with efficiently working ventilation, avoid inhaling product mists, use respiratory tract-protective agents

Eyes: avoid direct contact of the product with eyes use glasses.

Hands: avoid direct contact of the product with skin, immediately take off clothes soiled with the preparation and wash contaminated skin with soapy water, use personal protective, clothing and protective gloves:

In full contact:

Glove material: nitrile rubber

Layer thickness: 0,11 mm

Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber

Layer thickness: 0,11 mm

Breakthrough time: > 480 Min.

Industrial hygiene: you must not have meals, drink, or smoke tobacco while working with the preparation, except in places designed for that purpose. Wash your hands after work with the substance carefully with soapy water. Apply skin-protective barrier cream.

9. Physical and Chemical Properties.

Form:	<i>liquid</i>
Colour:	dark blue
Odour:	smell of vinegar
Vapour pressure:	no data available
Boiling temperature:	no data available
Melting temperature:	no data available
Ignition temperature:	incombustible
Flammability:	incombustible
Density:	-
pH:	1,0 (20-25 °C)

10. Stability and Reactivity:

<p>Conditions to be avoided: Strong heating. Temperatures < 0°C.</p> <p>Substances to be avoided: Aldehydes, alcohols, halogen-halogen compounds, oxidizing agent (i.a. CrO₃, potassium permanganate, peroxi compounds, perchloric acid, chromosulfuric acid), metals (iron, zinc, magnesium (generation of hydrogen)), alkali hydroxides, nonmetallic halides, ethanolamine.</p> <p>Dangerous decomposition products: In the case of fire – vapours acetic acid. In contact with some metals generating hydrogen.</p> <p>Further information: Explosible with air in a vaporious/gaseous state.</p>

11. Toxicological Information:

<p>The preparation toxicity evaluation is based on evaluation of the toxicity of 100% acetic acid.</p> <p>Acute toxicity: CL₅₀ (inhalation, rat): 11,4 mg/l/4 h. DL₅₀ (dermal, rabbit): 1060 mg/kg</p>

DL₅₀ (oral, rat): 3310 mg/kg
Specific symptoms in animal studies:
Eye irritation test (rabbit): burns.
Skin irritation test (rabbit): burns.
Subacute to chronic toxicity:
Bacterial mutagenicity: Salmonella typhimurium: negative.
No teratogenic effect in animal experiments.
Further toxicological information:
Strongly corrosive substance.
After inhalation of vapours: Irritation symptoms in the respiratory tract, pneumonia bronchitis.
Inhalation may lead to the formation of oedemas in the respiratory tract.
After skin contact: Burns.
After eye contact: Burns. Risk of blindness! Risk of corneal clouding. Burns of mucous membranes.
After swallowing: Burns in oesophagus and stomach. Gastric spasms, bloody vomiting, dyspnoea. Risk of perforation in the oesophagus and stomach. Pulmonary failure possible after aspiration of vomit.
Cannot be excluded: shock, cardiovascular failure, acidosis. Damage of: kidneys.
Further data:
The product should be handled with the care usual when dealing with chemicals.

12. Ecological Information:

The evaluation was performed on the basis of the properties of 100% acetic acid.

Biologic degradation:

Biodegradation: 99%/30 d (closed bottle test).
Readily biodegradable.

Behavior in environmental compartments:

Distribution: log P(o/w): -0,17 (experimental).
No bioaccumulation is to be expected (log P(o/w) <1).
Passage from aqueous solution into the atmosphere is not to be expected.

Ecotoxic effects:

Biological effects:
Harmful effect on aquatic organisms. Harmful effect due to pH shift. Caustic even in diluted form.
Fish toxicity: Limnea macrochirus LC₅₀: 75 mg/l/96 h.
P. promelas LC₅₀: 88 mg/l/96 h.
Daphnia toxicity: Daphnia magna EC₅₀: 47 mg/l/24 h.
Bacterial toxicity: Photobacterium phosphoreum EC₅₀: 11 mg/l/15 min. microtox-test.
Maximum permissible toxic concentration:
Algal toxicity: Scenedesmus quadricauda IC₅: 4000 mg/l/16 h.
Bacterial toxicity: Pseudomonas putida EC₅: 2850 mg/l/16 h neutral.
Protozoa: Entosiphon sulcatum EC₅: 78 mg/l/72 h neutral.

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

13. Disposal Considerations:

Product:

Avoid discharging into sewers. In case of discharge in sewer, dilute with water (at least 5 times) or neutralize with a base.

Packing:

Keep waste in closed and acid-resistant containers provided for this purpose. If the regulations do not provide otherwise, non-contaminated packages can be treated like household waste or forward them to be utilized.

14. Transportation Information:

The product is not subject to transport regulations.

15. Regulatory Information:

Material Safety Data Sheet was prepared in accordance with:

The EC Directive Nr UE2001/58/WE, the EC Directive Nr 1999/45/EG, the EC Directive 67/548 EEC, EC Directive 88/379/EEC or the EC Directive 91/155/EEC (Dangerous Product Regulations incl. EC Guidelines). Regulation (EC) No 1907/2006 of European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (attachment II)
See Polish regulations.

Marking:



Corrosive

Contains acetic acid

C – Corrosive

Risk phrases (R):

R 34 – Causes burns.

Safety phrases (S):

S 23-26-45 - Do not breathe vapour/spray. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. Other Information.

R 34 – Causes burns.

The foregoing information is based on the present state of our knowledge. It characterizes the product with respect to the appropriate safety measures. They do not guarantee the properties of the product.

We do not take responsibility for damage and losses that may result from inappropriate use of the preparation.

Reason of changes:

Changes In

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