

1. Safety precautions

Before using the product, read this instruction manual thoroughly at first. Do not start the operation until you understand the contents of this manual. Also, this document describes only method used for specified purpose with this product. Do not use this product for any purpose or by any method other than described here. If you use this product for any purpose or by any method other than described in this manual, you will be held responsible for any necessary safety measures as an operator.

2. Application

This product is discontinuous/electrode buffer used for native PAGE with polyacrylamide gel.

It can be used as a buffer for DNA electrophoresis using our pre-cast gels, and as a blotting buffer by adding methanol.

3. Package

Product name	Volume	Package
EzRun TG	500mL	1 bottle

4. Composition

Product name	Main component
EzRun TG	0.25M Tris , 1.92M glycine

This product does not contain any poisonous or deleterious substances as defined by the Poisonous and Deleterious Substances Control Act, or any substances subject to notification that exceed the exempted amount of chemical substances specified in PRTR Law and Industrial Safety and Health Law.

If you need SDS, please contact our sales department.

5. Storage

- Keep **EzRun TG** at room temperature, away from direct sunlight.

If it is unopened, stable until the expiration date.

- Seal dilute solution of **EzRunTG** tightly, and keep it at room temperature, away from direct sun light.
- Used buffer cannot be reused.

6. Disposal method

- Follow the disposal method regulated by the organization you belong to.

●Material of bottle Main unit/Lid Polypropylene

7. Necessary things other than this product

- Magnetic stirrer
- Beaker
- Container such as media bottle
- Distilled water
- Electrophoresis apparatus
- Power supply for electrophoresis
- Stirrer bar
- Graduated cylinder
- Methanol
- Blotting apparatus

8. Precautions for use

- This product is 10x stock solution.
Dilute it in accordance with the usage when it is used.
- **EzRun TG** doesn't include preservatives.
Be careful of contamination at the time of opening.
- **EzRun TG** is sterilized, but be careful sterilized condition may not be maintained if various germs are mixed after the package is opened.

9. Usage

A. Native PAGE

1. Preparation of electrode buffer
Dilute **EzRun TG** 10 times with distilled water.
In case of making 500mL buffer, add 50mL **EzRun** to 450mL distilled water and mix them.
2. Electrophoresis
Run at 20mA constant current per gel.
For mini-gels, run at 20 mA constant current for 70-80 min. and for compact gels, run at 20 mA for 25-30 min.
When electrophoresis is run with constant current, the voltage at the end is about 300V for both mini gel and compact gel.

B. DNA electrophoresis

- Use our pre-cast gels and run DNA electrophoresis.
1. Preparation of electrode buffer
Dilute **EzRun TG** 10 times with distilled water.
In case of making 500mL buffer, add 50mL **EzRun** to 450mL distilled water and mix them.
 2. Electrophoresis
Run at 20mA constant current per gel.
For mini-gels, run at 20 mA constant current for 70-80 min. and for compact gels, run at 20 mA for 25-30 min.
When electrophoresis is run with constant current, the voltage at the end is about 300V for both mini gel and compact gel.

C. Tank-type blotting

1. Preparation of blotting buffer
Prepare methanol to 5-20%, depending on the purpose.
For example, to make 5% methanol solution, dissolve 50 mL methanol and 100 mL EzRun TG in 850 mL distilled water.
2. Pretreatment of membranes and filter papers
 - Hydrophilize the membrane (PVDE membrane).
Pour several mL of methanol into a container larger than the membrane, and soak the membrane.
 - Pour the blotting buffer prepared above into another container, add the membrane and shake for 10-30 min.

For details on the operation of tank-type blotting, read the instruction manual of the apparatus you are using.

This product is not compatible with semi-dry blotting.

10. Supplementary item

- Refer to and follow an instruction manual of electrophoresis apparatus and power supply you use with this product.
- For blotting, follow the instruction manual of the blotting apparatus you are using.
- The apparatus used for blotting may have a maximum load current / voltage. Please check before use.
- Please consider the methanol concentration when using for blotting, depending on the molecular weight of the target protein.
- When the methanol concentration is increased to 10-20%, the transfer efficiency of low molecular weight proteins tends to increase. However, high molecular weight proteins tend to be harder to remove from the gel.

