WSE-7065 *EzRun MOPS* Instruction Manual

July 14th, 2016 Ver.3

1. Safety precautions

Before using the product, read this manual thoroughly at first. Do not start an operation until you understand the contents of manual. The manual explains only method utilized for specified purposes. Do not use the product for any purpose or by any method not described in the manual. If it is used for any purpose or by any method not described in the manual, an operator should take responsibility for all required safety measures and contingencies.

2. Application purpose

The product is electrode buffer used for SDS discontinuous electrophoresis with polyacrylamide gel.

3. Package

Product name	Volume	Package
EzRun MOPS	250mL	1 bottle

4. Components

Product name	Major components
EzRun MOPS	Tris, MOPS, SDS

The product includes notifiable materials exceeding to regulated amount for exclusion decided by PRTR Law. If you need more details or (M)SDS, please contact our company.

5. Preservation method

- Keep ***EzRun MOPS*** at room temperature, away from direct sun light. If it is unopened, it is stable until the expiration date.
- Seal dilute solution of ***EzRun MOPS*** tightly, and keep it at room temperature, away from direct sun light.
- If ***EzRun MOPS*** is stored at low temperature, the components may educe from it. In this case, warm it with tepid water of 30 ~40℃ to dissolve educed materials before using it.
- Used buffer cannot be reused.

6. Disposal method

- Follow the disposal method decided by the organization you belong to.
- Material of bottle

  Main unit/Lid Polypropylene

7. Necessary things other than the product

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

8. Precautions for use

- The product is 20x stock solution. Dilute it in accordance with the usage, when it is used.
- In comparison with Tris-Glycine-SDS buffer such as ***EzRun***, the run time with the product is shorter. For example, if our pre-cast gel, e-PAGEL, is run, it takes about 45 min at constant voltage (250V) with ***EzRun***. However, it completes to run it in about 25 min with ***EzRun MOPS***. Take note of the setting of run time.
- In the case of running at constant voltage, it is possible that temperature of buffer and gel becomes high. Especially, glass plates may be damaged if it gets cool suddenly. When you deal with glass plates, protect your body with gloves etc.

9. Usage

1.Preparation of electrode buffer

Dilute ***EzRun MOPS*** 20 times with distilled water. When you make 500mL electrode buffer, add 25mL ***EzRun MOPS*** to 475mL distilled water, and mix them.

2.Electrophoresis

Run gels at 20mA of constant current per a gel or at 250V of constant voltage. The required electrophoresis condition (Current and Voltage value) and run time for Mini gel/ Compact gel are indicated below.

*The set value per 1 gel

	Setting	mA	V	Run time
Mini gel 80x90x1mm	Constant current	20	180	60~70 min
	Constant voltage	<100	250	25~30 min
Compact gel 60x60x0.8mm	Constant current	20	180	25~30 min
	Constant voltage	<70	250	15~20 min

*In the case of constant current setting, change the current value to set in accordance with the number of gels. For example, when 2 gels are run, set 40mA which is 2 times value of the setting against 1 gel.

*In the case of constant voltage setting, it is not necessary to change the voltage value when the number of gel to run is increased to 2. Set 200mA or more because max current value for 2 gels is about 150mA.

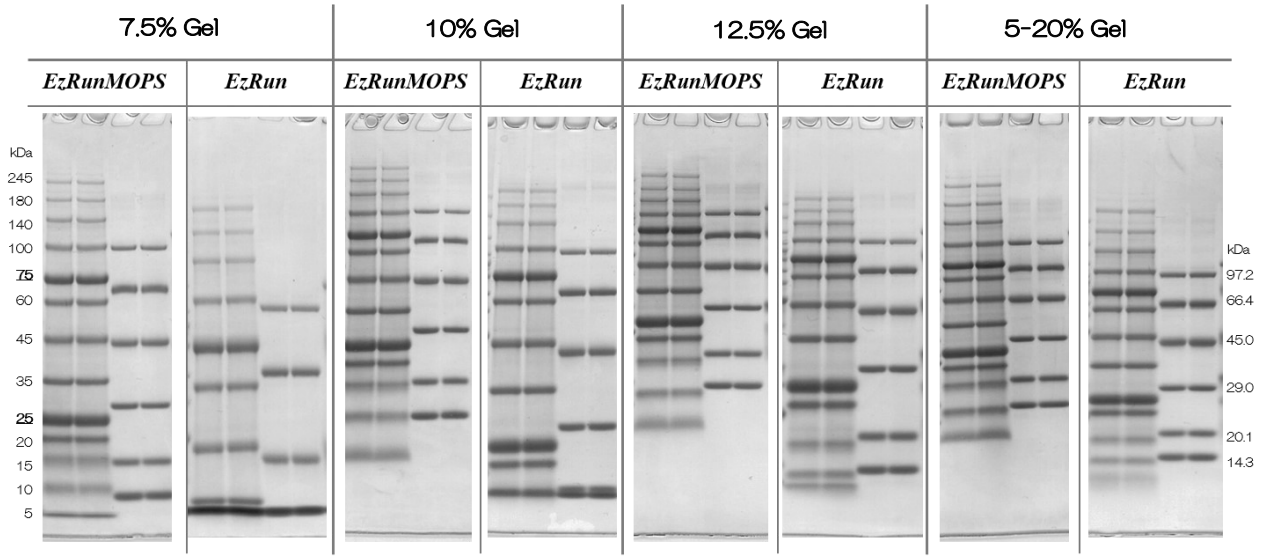
*Follow the instruction manual of electrophoresis and power supply you use.

*The mobility in each gel concentration is described below.

10. Supplementary item

● In comparison with Tris-Glycine-SDS buffer such as ***EzRun***, the mobility is different. Refer to the following images, and consider gel concentration against proteins to separate.

The mobility of molecular weight marker in each gel concentration



Left 4 lanes : WSE-7020 EzProtein Ladder
Right 4 lanes : AE-1440 EzStandard

ATTO CORPORATION
3-2-2 Motoasakusa,
Taito-ku, Tokyo 111-0041, JAPAN
Tel +81 3 5827 4863
Fax +81 3 5827 6647
E-mail: eig@atto.co.jp
http://www.atto.co.jp/eng

Distributed by: