

Tris-Glycine Buffer (TG) and Tris-Glycine-SDS (TG-SDS) pH 8.3



Features

- Running buffers for protein electrophoresis
- Formulated from analytical grade reagents
- Assured consistency from lot to lot
- Exactly pre-weighed powder mix in pouches
- Dissolve and use in minutes

Product description

Tris-glycine buffer (TG) is the most common running buffer in native (non-denaturing) homogeneous and gradient polyacrylamide gel electrophoresis (PAGE) of proteins. Tris-glycine gels resolve proteins by size. However, very small proteins and peptides do not resolve well due to interference from the glycine/pH discontinuity front.

TG buffer is also used to make Tris-glycine/20% methanol Western transfer buffer, which is the most frequently used protein transfer buffer for wet blot transfers.

Tris-glycine-SDS buffer (TG-SDS) contains the denaturing agent sodium dodecyl sulphate (SDS). Protein electrophoresis under denaturing conditions (SDS-PAGE) involves separating proteins based on their size. By treating the sample under denaturing and reducing conditions with SDS, proteins unfold and become coated with SDS detergent molecules.

Medicago's TG and TG-SDS buffer are supplied as pre-weighed powder mixes in sealed pouches giving 1000 ml or 5000 ml of 0.025 M Tris, 0.192 M glycine with pH 8.3 at 25°C and 0.025 M Tris, 0.192 M glycine, 0.10% SDS with pH 8.3 at 25°C.

Applications

- Protein electrophoresis
- Denatured protein electrophoresis
- Polyacrylamide gel electrophoresis
- Western blotting

Directions for use

Empty one pouch of the TG or TG-SDS buffer in a laboratory flask or beaker placed on a magnetic stirrer. Add deionized water and stir the solution for a few minutes. Adjust the volume up to 1000 ml or 5000 ml, stir until full dissolution and the buffer solution is ready to use.

Shipping and storage

The TG and TG-SDS buffers are shipped at room temperature. Store the pouches in a dry place at room temperature. Shelf life is three years.

Tips and hints

If the contents of the pouch is not properly dissolved, make sure:

- the water temperature is 25°C (do not exceed this temperature)
- the buffer is properly stirred.

Sterilization can be performed by filtration. Filtrate the buffer solution through a 0.22 µm filter into a sterile flask. Keep the buffer solution at +4°C.

Specifications

	Tris-Glycine buffer	Tris-Glycine-SDS buffer
Chemicals	Analytical grade	Analytical grade
Format	Exactly pre-weighed powder mix	Exactly pre-weighed powder mix
Concentration	0.025 M Tris, 0.192 M glycine	0.025 M Tris 0.192 M glycine 0.10% SDS
Volume	1000 ml and 5000 ml	1000 ml and 5000 ml
pH	8.3 ± 0.05 at 25°C	8.3 ± 0.05 at 25°C
Shelf life	Three years after production date	Three years after production date



SMARTBUFFERS

Certifications

Medicago's laboratories and manufacturing site in Uppsala are ISO 9001:2008 and ISO 13485:2003 certified. Each stage of the manufacturing process is controlled and monitored by stringent quality control procedures to guarantee the highest possible quality and lot-to-lot reproducibility.



v. 01.2010-06

Ordering information

Article no.	Product name	Pack size	Solution vol.
A12-9122-10	Tris-Glycine buffer 1x pH 8.3	10 pouches	1000 ml/pouch
A12-9123-10	Tris-Glycine buffer 1x pH 8.3	10 pouches	5000 ml/pouch
A12-9222-10	Tris-Glycine-SDS buffer 1x pH 8.3	10 pouches	1000 ml/pouch
A12-9223-10	Tris-Glycine-SDS buffer 1x pH 8.3	10 pouches	5000 ml/pouch