NRS II Transwab® is MWE’s name for its range of swab based environmental sampling devices for the food, pharmaceutical, biotechnology and cosmetic industries. There can also be applications in healthcare including the monitoring of infection control measures.

All NRS II Transwab® devices feature MWE’s leak proof labelled self standing screw-cap tube made from shatterproof polypropylene, with a high visibility blue shaft swab attached to the cap. The swab features a rayon bud that can remain immersed in liquid, yet retains MWE’s high standard for absorption, survival and release of microorganisms. The tubes are prefilled with the specified volume of solution and there is a choice of NRS, MWE’s classic neutralising rinse solution, and a range of alternative buffers and media appropriate for particular applications.

NRS (Neutralising Rinse Solution)
NRS Medium contains lecithin, polysorbate 80, and sodium thiosulphate in a peptone phosphate buffer. The formulation conforms to ISO 18593 and will neutralise most disinfectants used in the food industry, including those based on chlorine, peroxxygen compounds, amphoteric, biguanides, and glutaraldehyde. This is a universal neutralising solution suitable for testing most disinfected areas within the food, cosmetic and pharmaceutical industries. Precise fill volumes allow accurate quantitative assessment of contamination levels.

Buffered Peptone Water
Buffered Peptone Water contains peptone and sodium chloride, with a phosphate buffer, and is used for the recovery of Salmonella, especially in environments where they may have been sub-lethally injured.

Butterfield Buffer
Butterfield Buffer (also called Butterfield’s Solution or Butterfield’s phosphate buffered dilution water) contains potassium phosphate as specified by APHA and FDA, and is used in standard methods for the enumeration of bacteria and fungi in foods, water and pharmaceutical products. The standard formulation has been modified by the inclusion of a low level of peptone to reduce osmotic shock, and polysorbate 80 as a surfactant to assist the sampling process.

Letheen Broth
Letheen media are used to determine the bactericidal efficacy of quaternary ammonium based disinfectants.

Pre-moistened
Letheen broth is a growth medium recommended by the FDA for use in the microbiological testing of cosmetics, and the formulation is as described in the FDA Bacteriological Analytical Manual. Polysorbate 80 and lecithin are included to partially neutralise the preservatives commonly found in cosmetics.

**MRD (Maximum Recovery Diluent)**

Also called Peptone Saline. Maximum Recovery Diluent is an isotonic and protective medium for maximum recovery of microorganisms from environmental and food sources. It is also the recommended diluent for the sampling of carcasses in the European Union.

**Tryptic Soy Broth**

Tryptic Soy Broth is a general purpose recovery medium with excellent growth properties for aerobes, anaerobes, and some fungi. It is widely used for sterility testing, particularly in pharmaceutical manufacturing.

**NRS without Sodium Thiosulphate**

Some testing methods (such as Petrifilm®) require medium without thiosulphate.

---

**Choice of fill**

NRS medium and variants are available in a choice of 3 fill sizes

- 10ml and 5ml are used with standard and filtration methods.
- 1ml can be used directly with Petrifilm®, and other direct pour plating techniques