

POLYENRICHMENT SUPPLEMENT

BLPS-00P-010

- **Principle**

Polyenrichment Supplement is a nutrient-rich supplement designed to enhance the growth of fastidious microorganisms, particularly pathogenic *Neisseria* species. Its formulation provides essential growth factors, vitamins and metabolic cofactors required by microorganisms with demanding nutritional requirements.

The supplement contains components such as L-glutamine, adenine, β -NAD, cocarboxylase, guanine, ferric nitrate, p-aminobenzoic acid, vitamin B12 and thiamine. These nutrients help improve the performance of enriched culture media by supporting bacterial metabolism and promoting more reliable growth of nutritionally demanding strains.

When combined with an appropriate agar base and haemoglobin, the supplement provides the enrichment needed to support the growth of *Neisseria* spp. and other fastidious organisms. Haemoglobin contributes hemin, while the supplement supplies additional cofactors and vitamins necessary for optimal microbial recovery. Antimicrobial supplements may also be added when increased selectivity of the complete medium is required.

- **Regulatory compliance**

This product is manufactured under a quality management system in accordance with ISO 9001 and ISO 13485, and its formulation and quality control comply with applicable international standards, such as ISO 11133, where relevant.

- **Composition (Vial A)**

Ingredients	mg
L-Glutamine	100
Adenine	10
β -NAD	2,5
Cocarboxylase	1
Guanine	0,3
Ferric nitrate	0,2
p-Aminobenzoic acid	0,13
Vitamin B12	0,10
Thiamine (Vitamin B1)	0,03

Ingredients - Vial B	
Sterile distilled water	9 ml
Glucose	0.5 mg

- **Preparation**

Under aseptically conditions, reconstitute 1 vial of Polyenrichment Growth Supplement (Vial A) with 1 vial of Polyenrichment Restoring Solution (Vial B). Mix gently until the contents are completely dissolved.

Aseptically add the reconstituted supplement to 250 ml of suitable agar base, previously autoclaved and cooled to approximately 50 °C, together with 250 ml of sterile 2% haemoglobin solution, or to 500 ml of Blood Agar Base (ABBL-00P), previously autoclaved and cooled to approximately 50 °C.

Mix thoroughly to ensure a homogeneous distribution and dispense the complete medium into sterile containers.

- **Applications and use**

Polyenrichment Supplement is intended for the preparation of enriched culture media used for the cultivation and isolation of fastidious microorganisms, especially pathogenic *Neisseria* species. It may also support the growth of *Haemophilus* species when used in combination with haemoglobin and an appropriate culture medium.

The exact inoculation procedure, incubation conditions and interpretation criteria should follow the instructions applicable to the medium and the analytical method being used.

- **Quality control**

Colour	Pink
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- **Microbiological test**

For performance testing, inoculate the medium using 30-300 CFU for productivity testing, and 1000-10000 CFU for selectivity testing.

Incubate under microaerophilic conditions at 37 ± 1 °C and read the results after 24–48 hours.

Microorganism	ATCC	Growth
<i>Neisseria meningitidis</i>	13090	Good
<i>Neisseria gonorrhoeae</i>	19424	Good

- **Storage and shelf life**

Shelf life: 49 months. The declared expiry is valid only when stored as per the conditions mentioned on the label (Temp. Min.:2 °C Temp. Max.:25 °C).

- **Sterility control**

Add 5 ml of sample to 100 ml of TSB and to 100 ml of Thioglycolate.

- **Bibliography**

Murray, P.R., E.J. Baron, M.A. Pfaller, F.C. Tenover and R.H. Tenover (ed.) 1995 Manual of Clinical Microbiology, 6th ed. American Society for Microbiology, Washington, D.C

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.