

# **Technical Data Sheet**

**MSRV Selective Supplement** 

Ordering number: 1.09874.0010

The selective supplement contains novobiocin sodium salt in lyophilized form.

According to EN ISO 6579/Amd 1 and EN ISO FDIS 6579-1, MSRV medium contains 10 mg/l novobiocin whilst the original composition of MSRV medium contains 20 mg/l (de Smedt et al. 1986).

## Mode of Action

Novobiocin suppresses growth and motility of the majority of competitor flora. It also prevents the swarming of *Proteus spp*.

Studies have shown larger migration zones on MSRV medium with a lower concentration of novobiocin and the (negative) influence of novobiocin on bacterial motility (Veenman et al. 2007).

## **Typical Composition\***

	Gram per vial	[g/l] final medium
Novobiocin Sodium Salt	0.01	0.01

\* Composition according EN ISO 6579

#### Preparation

Dissolve the lyophilized supplement by adding 1 ml sterile distilled water. Mix gently until dissolved.

Add the supplement to MSRV medium cooled to 45-50 °C. Mix gently and pour to plates.

For working according to EN ISO 6579 use 1 vial of the MSRV Selective Supplement solution per 1000 ml MSRV (Modified Semi-solid RAPPAPORT-VASSILIADIS) Medium (Base) acc. ISO 6579 (article number 1.09878.0500).

## Storage

Usable up to the expiry date when stored dry and tightly closed at +2 °C to +8 °C.

## **Quality Control**

MSRV Selective Supplement is tested in MSRV (Modified Semi-Solid RAPPAPORT-VASSILIADIS) Medium (Base) acc. ISO 6579 with 10 mg/l novobiocin sodium salt in accordance with EN ISO 6579/Amd 1:2007 and EN ISO/FDIS 6579-1:2015.

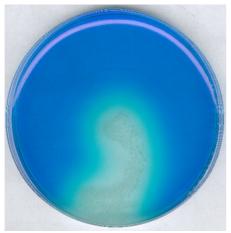


MSRV Selective Supplement is tested in MSRV medium with 10 mg/l and 20 mg/l novobiocin sodium salt in accordance with the current version of EN ISO 11133.

Function	Control strains	Incubation	Method of control	Expected results
Productivity	Salmonella Typhimurium ATCC <sup>®</sup> 14028	2x 21-27 h at 40.5-42.5 °C	Qualitative	Grey-white, turbid zone extending out from inoculated drop.
	Salmonella Enteritidis ATCC <sup>®</sup> 13076			After 24-48 h, the turbid zone will be (almost) fully migrated over the plate.
Selectivity	<i>Escherichia coli</i> ATCC <sup>®</sup> 8739	- 2x 21-27 h at 40.5-42.5 °C	Qualitative	Possible growth at the place of the inoculated drop without a turbid zone.
	<i>Escherichia coli</i> ATCC <sup>®</sup> 25922			
	<i>Enterococcus faecalis</i> ATCC <sup>®</sup> 19433			No growth
	Enterococcus faecalis ATCC <sup>®</sup> 29212			
	<i>Citrobacter freundii</i> ATCC <sup>®</sup> 8090			

Both performance tests are indicated on the product's Certificate of Analysis.

Please refer to the actual batch related Certificate of Analysis.



Salmonella Typhimurium ATCC® 14028



Citrobacter freundii ATCC<sup>®</sup> 8090

## Literature

De Smedt, J.M., Bolderdijk, R.F., Rappold, H. and Lautenschlaeger, D. (1986): Rapid *Salmonella* detection in foods by motility enrichment on a modified semi-solid Rappaport-Vassiliadis Medium. J. Food Prot. **49**: 510-514.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Salmonella* spp. EN ISO 6579:2002.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Salmonella* spp. -- Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage. EN ISO 6579:2002/Amd 1:2007.



ISO International Standardisation Organisation. Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Horizontal method for the detection of *Salmonella* spp. EN ISO/FDIS 6579-1:2015.

ISO International Standardisation Organisation. Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media. EN ISO 11133:2014.

Veenman, C., Korver, H. and Mooijman, K.A. (2007): Improvements in the method for detection of *Salmonella* spp. In animal faeces. National Institute for Public Helath and the Environment, Bilthoven, the Netherlands. RIVM report 330300 010. <u>http://www.rivm.nl/bibliotheek/rapporten/330300010.pdf</u>.

#### **Ordering Information**

Product	Cat. No.	Pack size
MSRV Selective Supplement	1.09874.0010	10 x 1 vial
MSRV (Modified Semi-Solid RAPPAPORT- VASSILIADIS) Medium (Base) acc. ISO 6579	1.09878.0500	500 g

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