



TECHNICAL DATA SHEET

DESCRIPTION MRS AGAR, BOTTLED
SGL PRODUCT CODE 4605

A medium for the isolation and enumeration of *Lactobacillus* spp. and other mesophilic lactic acid bacteria from all types of materials. The medium contains a rich blend of nutrients and growth factors; the low selectivity also supports the growth of *Pediococcus* and *Leuconostoc* spp.

This product complies with the specification given by ISO 15214 and APHA.

FORMULATION

Typical product composition*:

COMPONENT	WEIGHT / VOLUME
Enzymatic digest of casein	10.0 g
Meat extract	10.0 g
Yeast extract	4.0 g
Triammonium citrate	2.0 g
Sodium acetate	5.0 g
Magnesium sulphate heptahydrate	0.2 g
Manganese sulphate tetrahydrate	0.05 g
Dipotassium hydrogen phosphate	2.0 g
Glucose	20.0 g
Polysorbate 80	1.08 g
Agar	15.5 g
Purified water	1000 ml

*Product may be adjusted and/or supplemented to meet performance criteria

QUALITY CONTROL SPECIFICATION

PHYSICAL TESTS	SPECIFICATION CRITERIA
Appearance	Translucent brown coloured gel
pH at 20-25°C	5.7 ± 0.2

STERILITY TESTS	SPECIFICATION CRITERIA
Incubation at 22-25°C for 10 days	No growth detected
Incubation at 35-37°C for 10 days	No growth detected
Incubation at 42-45°C for 10 days	No growth detected

GROWTH PROMOTION / INHIBITION TESTS	SPECIFICATION CRITERIA
<i>Lactobacillus casei</i> var <i>rhamnosus</i> NCTC 10302 NMT 100 CFU inoculum	≥50% CFU recovery compared to control at 28-32°C CO ₂ incubation after not more than 3 days
<i>Lactobacillus sakei</i> ATCC 15521 NMT 100 CFU inoculum	≥50% CFU recovery compared to control at 28-32°C CO ₂ incubation after not more than 3 days



GROWTH PROMOTION / INHIBITION TESTS	SPECIFICATION CRITERIA
<i>Lactococcus lactis</i> ssp. <i>lactis</i> ATCC 19435 NCTC 6681 NMT 100 CFU inoculum	≥50% CFU recovery compared to control at 28-32°C incubation after not more than 3 days
<i>Pediococcus damnosus</i> ATCC 29358 NCIMB 12010 NMT 100 CFU inoculum	≥50% CFU recovery compared to control at 28-32°C incubation after not more than 3 days
<i>Bacillus cereus</i> ATCC 11778 NCTC 10320 NLT 10000 CFU inoculum	Total inhibition at 28-32°C incubation after not more than 3 days
<i>Escherichia coli</i> ATCC 25922 NCTC 12241 NLT 10000 CFU inoculum	Total inhibition at 28-32°C incubation after not more than 3 days
<i>Staphylococcus aureus</i> ATCC 6538 NCTC 10788 NLT 10000 CFU inoculum	Total inhibition at 28-32°C incubation after not more than 3 days

NMT = Not more than

NLT = Not less than

CFU = Colony forming units

Additional specification testing may be performed as requested by the customer.

Manufactured in compliance with ISO 9001 (Ref No FM37824) and tested in accordance with ISO 11133 by a UKAS (ISO 17025) accredited laboratory (Ref No. 4356).