

Technical Data Sheet

Tryptic Soy Contact Agar – RT

Ordering number: 1.46240.0020

Tryptic Soy Contact Agar - RT is designed for the determination of the total aerobic microbial count on dry surfaces and personnel in controlled environments and for **Room Temperature** storage.

Ten contact plates each with a diameter of 55 mm are single-bagged in transparent, hydrogen peroxide impermeable sleeves (non-irradiated). The sleeves consist of polypropylene with a barrier of PE-EVOH-PE.

The formulation of the basic medium (Soybean-Casein Digest Agar) is prepared according to the recommendations of the current European, Japanese and United States Pharmacopoeia (EP, 2.6.12.; JP, 4.05 and USP, 61).

Mode of Action

Tryptic Soy Agar (TSA, Soybean Casein Digest Agar) is a complex medium for cultivation and isolation of a wide range of bacteria, yeasts and molds.

Typical Composition

Casein Peptone	15 g/l
Soy Peptone	5 g/l
NaCl	5 g/l
Agar	15 g/l

The appearance of the medium is clear and yellowish. The pH value is in the range of 7.1-7.5. The medium can be adjusted and/or supplemented according to the performance criteria required.

Application and Interpretation

The TSA contact plates are utilized for hygiene monitoring (environmental monitoring) on surfaces and personnel in controlled environments.

Each plate is provided with a label including a data matrix code for paperless plate identification. The code consists of a two-dimensional 20-digit serial number, which harbors the following information:

digits 1-3: here code 864 (corresponds to article 146240); digits 4-9: lot number; digits 10-14: batch specific individual number; digits 15-20: expiration date (YY/MM/DD).

Please check each agar plate before using it on sterility and pay attention to aseptic handling in order to avoid false positive results.

According to ISO 14698 the plates are opened and the agar surface is pressed on the dry surface to be tested for some seconds with a steady pressure. Similar recommendations are included in the PDA technical report No.13. Afterwards the plates are closed and transferred to an incubator. Residues of culture medium should be removed from the surface after sampling.

Several recommendations are given by different guidelines for incubation: according to USP <1116> the plates used for environmental monitoring should be incubated between 20 and 35 °C for not less than 72 hours. According to the FDA Aseptic Guide the plates for determination of the total aerobic bacterial count should be incubated at 30 to 35 °C for 48 to 72 hours, while the plates for determination of the total yeast and mold count should be incubated at 20 to 25 °C for 5 to 7 days. Individual incubation conditions can be chosen and should be validated at the application side.

Finally the number of CFU per plate is examined.

Grown colonies are recommended to be identified.

Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +15 °C to +25 °C.

Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Control Strains	ATCC #	Inoculum CFU	Incubation	Expected Result Recovery in %
<i>Staphylococcus aureus</i>	6538	10-100	20-24 h at 30-35°C	70-200 %
<i>Escherichia coli</i>	8739	10-100	20-24 h at 30-35°C	70-200 %
<i>Pseudomonas aeruginosa</i>	9027	10-100	20-24 h at 30-35°C	70-200 %
<i>Bacillus subtilis</i>	6633	10-100	20-24 h at 30-35°C	70-200 %
<i>Candida albicans</i>	10231	10-100	44-48 h at 20-25°C	50-200 %
<i>Aspergillus brasiliensis</i>	16404	10-100	70-74 h at 20-25°C	50-200 %

Please refer to the actual batch related Certificate of Analysis.

Literature

EU GMP Medicinal Products for Human and Veterinary use (2008): Annex1 Manufacture of Sterile Medicinal Products.

European Pharmacopoeia 8.0 (2014): 2.6.12. Microbial examination of non- sterile products (total viable aerobic count).

Guidance for Industry (2004): Sterile Drug Products Produced by Aseptic Processing - Current Good Manufacturing Practice.

ISO 14698-1:2003: Cleanrooms and associated controlled environments - Biocontamination control - Part 1: General principles and methods.

Japanese Pharmacopoeia 16th edition (2011): 4.05 Microbial Limit Test.

PDA Technical Report No. 13 (2014 Revised): Fundamentals of an Environmental Monitoring Program.

United States Pharmacopoeia 38 NF 33 (2015): <61> Microbiological Examination of Non-Sterile Products: Microbial Enumeration Tests; <1116> Microbiological Control and Monitoring of Aseptic Processing Environments.

Ordering Information

Product	Cat. No.	Pack size
Tryptic Soy Contact Agar - RT	1.46240.0020	20 x 55 mm plates

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and liability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any right of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

MilliporeSigma, the vibrant M, Sigma-Aldrich and Millipore are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners.

Detailed information on trademarks is available via publicly accessible resources.
© 2019 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.