

10 October 2022

 Science Division  
 Department of Biology

## Reference materials for analyses of drinking water and food

### Description and storage

Instructions for the reference materials are available on our webpage ([www.livsmedelsverket.se/en/RM-micro](http://www.livsmedelsverket.se/en/RM-micro)). The instructions include tables with the concentrations of the microorganisms, and tolerance intervals, within which a single result should be found.

*Storage prior to delivery:* All vials are kept in the dark at  $-55\text{ }^{\circ}\text{C}$ .

*Storage after delivery:* Keep the vials in the dark at  $-18\text{ }^{\circ}\text{C}$  or lower. (But not lower than  $-55\text{ }^{\circ}\text{C}$ ).

*Table 1. Reference materials (RM) for drinking water analyses*

Reference material	Content	Suitable analyses
Dw 2022:A	<i>Escherichia coli</i> <i>Citrobacter freundii</i> <i>Clostridium perfringens</i> <i>Pseudomonas aeruginosa</i> <i>Enterococcus faecalis</i>	Coliform bacteria <i>Escherichia coli</i> <i>Clostridium perfringens</i> <i>Pseudomonas aeruginosa</i> Intestinal enterococci Culturable microorganisms
Dw 2021:B	<i>Cladosporium cladosporioides</i> <i>Saccharomyces cerevisiae</i> <i>Streptomyces sp. (griseus group)</i>	Micro fungi – moulds Micro fungi – yeasts Actinomycetes
Dw 2021:C	<i>Sphingomonas sp.</i>	Slow-growing bacteria $22\text{ }^{\circ}\text{C}$ , 7 days

10 October 2022

*Table 2. Reference materials (RM) for food analyses*

Reference material	Content	Suitable analyses
<b>Food 2021:12</b>	<i>Kocuria rhizophila</i> <i>Klebsiella oxytoca</i> <i>Escherichia coli</i> <i>Bacillus cereus</i> <i>Clostridium perfringens</i> <i>Staphylococcus aureus</i> <i>Enterococcus faecalis</i> <i>Candida sp.</i>	Aerobic microorganisms Contaminating microorganisms Lactic acid bacteria Coliform bacteria, 37 °C Coliform bacteria, 44 °C Enterobacteriaceae <i>Escherichia coli</i> Anaerobic sulphite-reducing bacteria <i>Clostridium perfringens</i> Coagulase-positive staphylococci Enterococci Presumptive <i>Bacillus cereus</i> Yeasts
<b>Food 2019:7</b>	<i>Rhizopus stolonifer</i> <i>Penicillium verrucosum</i> <i>Cladosporium cladosporioides</i> <i>Kluyveromyces marxianus</i>	Moulds and yeasts
<b>Food 2021:8</b>	<i>Saccharomyces cerevisiae</i> <i>Penicillium roqueforti</i> <i>Cladosporium cladosporioides</i>	Moulds and yeasts
<b>Food 2017:P-CS</b>	<i>Campylobacter jejuni</i> <i>Salmonella</i> Enteritidis Background flora	Thermotolerant <i>Campylobacter</i> <i>Salmonella</i>
<b>Food 2020:P-LE</b>	<i>Listeria monocytogenes</i> <i>E. coli</i> O157 (VT-negative) Background flora	<i>Listeria monocytogenes</i> <i>E. coli</i> O157