

# Reference Material

## Ethylene oxide in ice cream powder

### P2223-RMIce1



- Summary -

Please note:

Reference material P2223-RMIce1 is a validated control material and not a certified reference material. The reference material is validated in the ring test P2223-RT, which is organised, performed and evaluated according to the requirements of DIN EN ISO/IEC17043 and the “International Harmonized Protocol”. DIN ISO13528 is considered during the evaluation of the submitted results and during homogeneity testing. Details related to the applied statistics are summarised in the full specification, which is provided after purchase of the reference material.

Reference material P2223-RMIce1 consists of 120 g of an ice cream powder. Ingredients of the ice cream powder are dextrose, powder skimmed milk, emulsifier E471, thickener E410 (locust bean gum), E407, E412 (guar gum), and citric acid. The ice cream powder is not spiked, it was contaminated with ethylene oxide/2-chloroethanol probably by the ingredients locust bean gum and/or guar gum.

The reference material is validated in ring test P2223-RT with 10 laboratories. The assigned value, which is calculated of the results of the participants of the ring test P2223-RT, is summarised in table 1.

*Table 1. Assigned value*

Parameter	Assigned value [mg/kg]	Total number of results
Ethylene oxide*	0.460	10

\* Sum of ethylene oxide and 2-chloroethanol expressed as ethylene oxide acc. to regulation (EC) 396/2005.