

Approved by General Administration of Quality Supervision,

Inspection and Quarantine of the People's Republic of China

GBW(E) 100001a

Certificate of Reference Material

Food Dyestuff Tartrazine in Water

Sample Number:

Date of Certification:

Producer: National Institute of Metrology

Address: No.18,Beisanhuan donglu Beijing Tel: +86-10-64524710

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1. Description of Material & Intended Use

This certified reference material (CRM) is mainly used in areas such as food analysis and epidemic prevention, and for quality control, calibration of instruments, assessment of measurement methods and the like in Tartrazine analysis.

2. Sample Preparation

This CRM is formulated with GBW10003 Tartrazine purity reference material (the sample should be dried at $135^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 4 hours before using) as the starting material and pure water as the solvent based on gravimetric-volumetric method.

3. Traceability and Certification

The traceability linkage is established using formulation protocols, measuring protocols and instruments which meet the needs of the metrological community to be served. The property value of this RM is traced to GBW primary CRM. The formulated value is taken as certified value of the concentration of this solution CRM, and checked by HPLC (UV or DAD detector).

4. Property Value and Uncertainty

Number	Name	Certified Value (mg/mL)	Relative Expanded Uncertainty (%) ($k=2$)
GBW (E) 100001a	CRM of synthetic pigment Tartrazine	0.500	1

Uncertainty of certified value is a sum of those arising from the purity of primary RM starting material, and formulation process including the weighing and volume filling.

5. Consistency Check and Stability Test

According to the requirement of national technique criterion on primary CRM, the CRM aliquots are randomly sampled, and consistency check and stability test in terms of the concentration are performed by HPLC (UV or DAD detector). The results demonstrated good consistency (by F test) and stability.

The period of validity of this CRM is set for 3 years from the Date of Certification. The stability of this CRM will be monitored by NIM in the future. The user will be promptly informed, if the value is found to vary during the period of validity.

6. Instructions for Package, Storage and Usage

1. Package: This CRM is packaged in a glass ampoule, and each ampoule contains 10

mL.

2. Storage and Usage: This CRM should be stored in dark condition at room temperature. Prior to use, the RM should be equilibrated to room temperature (20 ± 5 °C) and mixed well by shaking. The CRM should be used immediately once the ampoule is open. Reusing of this CRM is prohibited.



STATEMENT

1. The CRM is only limited in use of scientific research and analytical measurement. Any loss caused by improper use and storage by customer will not be respond by maker.
2. Please check the kind, number and package as soon as the sample arriving. The compensate do not relate to any loss except for the CRM.
3. The maker only answer for the intact certificate with CRM cachet of nim. Please keep the certificate appropriately.
4. Please contact with technical consultant section, if more information related to the use of the CRM is needed.

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