



Approved by General Administration of Quality Supervision,
Inspection and Quarantine of People's Republic of China

GBW (E) 090096



Certificate of Certified Reference Material

Parabens in Cosmetics



Date of Certification 2009.01

Date of Expiration 2017.01

Producer: National Institute of Metrology

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1. Description of Material & Intended Use

The cosmetics certified reference material can be used for evaluating analytical methods reliability of similar component in cosmetics and insuring the accuracy and comparability of the results. It can also satisfy the demands from cosmetics manufacture, scientific research and inspection.

2. Preparation

The commercial available cosmetics (cream) which contain parabens were selected as the candidate of the reference material. After preliminary homogeneity test, it was packaged into clean brown glass bottles and sealed in hermetic bags.

3. Traceability and Certification

The parabens concentrations were determined by two different methods, HPLC and GC/MS, and the mean values were used as certificated values. To meet the requirement of metrology characteristic, the qualified measuring method and instruments are used.

4. Certified value and Uncertainty

The certified values and the uncertainties of the CRMs are as follows:

Number	Analyte	bottle	Certified value (mg.kg ⁻¹)		Uncertainty (%) (<i>k</i> =2)
GBW(E)090096	Parabens in cosmetics	1#	Methylparaben	1945.8	4.4
			Propylparaben	995.8	4.8
		2#	Ethylparaben	980.1	7.2
			Butylparaben	1013.8	6.6

The uncertainties given are the expanded combined uncertainty. *K* is the coverage factor at the 95% confidence level (*k*=2).

5. Homogeneity and Stability Assessment

According to the standard material specification, homogeneity and stability test for the certified reference material were carried out by HPLC method. The minimum sample intake is 0.2 g.

The results showed that the reference material was homogeneous and stable. The stability of this reference material will be monitored continually by NIM. Any change of the certified value during the period of validity will be informed to the customer in time.

6. Instructions for package, storage and use

Packaging: The reference material packaged by clean glass bottles with vacuum hermetic bags. Each bottle contains 15 g of sample, one set contain two bottles (1# and 2#).

Storage and using: The reference material should be kept in room temperature, and shake thoroughly before use.



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 answers for the intact certificate with CRM cachet of N. 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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