

HG

CHEMICAL INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HG/T 4445-2012

**Textile dyeing and finishing auxiliaries - Determination of
dimethyl fumarate**

纺织染整助剂 富马酸二甲酯的测定

(English Translation)

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1 Scope

This standard specifies the method for determining the dimethyl fumarate in textile dyeing and finishing auxiliaries by gas chromatography/mass spectrometry.

This standard is applicable to the determination of the dimethyl fumarate in textile dyeing and finishing auxiliaries.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition (including any amendments) applies.

GB/T 8170-2008 Rules of rounding off for numerical values & expression and judgment of limiting values

3 Theory

Using ethyl acetate as solvent, extract the dimethyl fumarate in textile dyeing and finishing auxiliaries by ultrasonic extractor, conduct qualitative and quantitative analysis on the extracting solution with a gas chromatograph-mass spectrometer, and determine the content of dimethyl fumarate in extracting solution by external standard method.

4 Reagents and materials

Unless otherwise specified, only recognized analytically pure reagents shall be adopted.

4.1 Ethyl acetate

dehydrated through 5A molecular sieve;

4.2 Dimethyl fumarate standard

with a purity $\geq 96\%$;

4.3

Needle type film filter head (PTFE), 0.45 μm ;