

ISO 23972:2021-10 (E)

Traditional Chinese medicine - Zingiber officinale rhizome

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Descriptions	2
5 Requirements	3
5.1 General characteristics	3
5.2 Zingiber officinale rhizome	3
5.2.1 Morphological features of rhizome	3
5.2.2 Microscopic characteristics	3
5.2.3 Thin-layer chromatogram (TLC) identification	3
5.2.4 Moisture content	3
5.2.5 Total ash	3
5.2.6 Volatile oil	4
5.2.7 Marker compound	4
5.2.8 Water-soluble extractives	4
5.2.9 Heavy metals	4
5.2.10 Pesticide residues	4
5.2.11 Residue of sulfur dioxide	4
6 Sampling	4
7 Test methods	4
7.1 Macroscopic identification	4
7.2 Microscopic identification	5
7.3 Thin-layer chromatogram (TLC) identification	5
7.4 Determination of moisture content	5
7.5 Determination of total ash content	5
7.6 Determination of volatile oil	5
7.7 Determination of marker compound 6-gingerol	5
7.8 Determination of water-soluble extractives	5
7.9 Determination of heavy metals	5
7.10 Determination of pesticide residues	5
7.11 Determination of residue of sulfur dioxide	5
8 Test report	5
9 Packaging and storage	6
10 Marking and labelling	6
Annex A (informative) Thin-layer chromatogram (TLC) identification	7
Annex B (informative) Determination of moisture content	9

Annex C (informative) Determination of 6-gingerol	11
Annex D (informative) Determination of water-soluble extractives	13
Annex E (informative) Referenced values of moisture, total ash, gingerol, volatile oil and water-soluble extractives contents on Zingiber officinale rhizome in different national and regional standards	14
Bibliography	15