

# ISO 4802-2:2016-06 (E)

## Glassware - Hydrolytic resistance of the interior surfaces of glass containers - Part 2: Determination by flame spectrometry and classification

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Principle .....	4
5	Reagents .....	4
6	Apparatus .....	6
7	Sample preparation .....	6
7.1	Sample size .....	6
7.2	Determination of the filling volume .....	7
7.2.1	Flat-bottomed containers 20 mm outer flange diameter (except ampoules, syringes and cartridges) .....	7
7.2.2	Flat-bottomed containers >20 mm outer flange diameter .....	7
7.2.3	Round-bottomed containers .....	7
7.2.4	Lipped containers .....	8
7.2.5	Ampoules .....	8
7.2.6	Syringes and cartridges .....	8
8	Procedure .....	8
8.1	General .....	8
8.2	Cleaning of samples .....	9
8.3	Filling and heating .....	9
8.4	Analysis of the extraction solutions .....	10
8.4.1	Containers of hydrolytic resistance container classes HCF 1, HCF 2 and HCF B or those known to be made from borosilicate glass .....	10
8.4.2	Containers of hydrolytic resistance container classes HCF 3 and HCF D, or those known to be made from soda-lime-silica glass .....	10
8.5	Testing to determine whether the containers have been surface-treated .....	11
9	Expression of results .....	11
9.1	Determination .....	11
9.2	Classification .....	12
9.3	Distinction between containers of hydrolytic resistance container class HCF 1 and hydrolytic resistance container class HCF 2 .....	12
9.4	Designation .....	12
10	Test report .....	12
11	Reproducibility .....	13
Bibliography .....		14