

ISO 11114-5:2022-01 (E)

Gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 5: Test methods for evaluating plastic liners

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General requirements	2
5	Tests to be performed on specimens	2
5.1	Permeation test	2
5.1.1	Disc samples	2
5.1.2	Test bench and set-up	3
5.1.3	Procedure	5
5.1.4	Calculation of the permeability coefficient	6
5.1.5	Recording and interpretation of test results	6
5.2	Swelling/blistering test	7
5.2.1	Disc samples	7
5.2.2	Recording and interpretation of tests results	7
5.3	Ageing test	8
5.3.1	Samples	8
5.3.2	Procedure	8
5.3.3	Recording and interpretation of the results	8
6	Tests to be performed on cylinders	9
6.1	Liner collapse due to internal pressure in the cylinder being below atmospheric pressure	9
6.1.1	General	9
6.1.2	Procedure	9
6.1.3	Evaluation parameters	9
6.2	Permeability test	9
6.2.1	General	9
6.2.2	Procedure	9
6.2.3	Evaluation parameters	10
6.3	Liner collapse and blistering test	10
6.3.1	General	10
6.3.2	Procedure	10
6.3.3	Evaluation parameters	10
7	Rejection and rendering cylinders used for testing unserviceable	12
8	Test report	12
Bibliography		14