ISO 9227:2017-03 (E)

Corrosion tests in artificial atmospheres - Salt spray tests

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Principle 3

5 Test solutions 3
5.1 Preparation of the sodium chloride solution 3
5.2 pH adjustment 3
5.2.1 pH of the salt solution 3
5.2.2 Neutral salt spray (NSS) test 3
5.2.3 Acetic acid salt spray (AASS) test 3
5.2.4 Copper-accelerated acetic acid salt spray (CASS) test 4
5.3 Filtration 4

6 Apparatus 4
6.1 Component protection 4
6.2 Spray cabinet 4
6.3 Heater and temperature control 4
6.4 Spraying device 4
6.5 Collecting devices 5
6.6 Re-use 5

7 Method for evaluating cabinet corrosivity 6
7.1 General 6
7.2 Reference specimens 6
7.3 Arrangement of the reference specimens 6
7.4 Determination of mass loss (mass per area) 7
7.5 Satisfactory performance of cabinet 7

8 Test specimens 7

9 Arrangement of the test specimens 8

10 Operating conditions 8

11 Duration of tests 9

12 Treatment of test specimens after test 9
12.1 General 9
12.2 Non-organic coated test specimens: metallic and/or inorganic coated 9
12.3 Organic coated test specimens 9
12.3.1 Scribed organic coated test specimens 9
12.3.2 Organic coated but not scribed test specimens 10

13 Evaluation of results 10

14 Test report 10

Annex A (informative) Example schematic diagram of one possible design of spray cabinet with means for optional treating fog exhaust and drain 12

Annex B (informative) Complementary method for evaluating cabinet corrosivity using zinc reference specimens 14

Annex C (normative) Preparation of specimens with organic coatings for testing 16

Annex D (normative) Required supplementary information for testing test specimens with organic coatings 17

Bibliography 18