

DIN EN ISO 9227:2024-10 (E)

Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227:2022 + Amd 1:2024) (includes Amendment :2024)

Contents	Page
European foreword.....	4
[A1] European foreword to Amendment A1 [A1]	5
Foreword.....	6
[A1] Foreword to Amendment A1 [A1]	7
Introduction	8
1 Scope.....	9
2 Normative references.....	9
3 Terms and definitions	10
4 Principle	10
5 Test solutions	10
5.1 Preparation of the sodium chloride solution.....	10
5.2 Preparation of each test solution with pH adjustment.....	11
5.2.1 pH of the salt solution.....	11
5.2.2 Neutral salt spray test	11
5.2.3 Acetic acid salt spray test.....	11
5.2.4 Copper-accelerated acetic acid salt spray test	11
5.3 Filtration	12
6 Apparatus.....	12
6.1 Component protection	12
6.2 Spray cabinet	12
6.3 Heater and temperature control	12
6.4 Spraying device.....	12
6.5 Collecting devices.....	13
6.6 Re-use	14
7 Method for evaluating cabinet corrosivity.....	14
7.1 General.....	14
7.2 Reference specimens	15
7.3 Arrangement of the reference specimens.....	15
7.4 Determination of mass loss (mass per area).....	15
7.5 Satisfactory performance of cabinet.....	16
8 Test specimens.....	16
9 Arrangement of the test specimens.....	16
10 Operating conditions	17
11 Duration of tests	17
12 Treatment of test specimens after test.....	18
12.1 General.....	18
12.2 Non-organic coated test specimens: metallic and/or inorganic coated.....	18
12.3 Organic coated test specimens.....	18
12.3.1 Scribed organic coated test specimens	18
12.3.2 Organic coated but not scribed test specimens.....	18

13	Evaluation of results.....	19
14	Test report	19
Annex A (informative) Example schematic diagram of one possible design of spray cabinet with means for optional treating fog exhaust and drain.....		
		21
Annex B (informative) Complementary method for evaluating cabinet corrosivity using zinc reference specimens		
		23
B.1	Reference specimens.....	23
B.2	Arrangement of the reference specimens	23
B.3	Determination of mass loss.....	23
B.4	Satisfactory performance of cabinet.....	24
Annex C (normative) Preparation of specimens with organic coatings for testing.....		
		25
C.1	Preparation and coating of specimens	25
C.2	Drying and conditioning	25
C.3	Thickness of coating	25
C.4	Preparation of scribe marks.....	25
Annex D (informative) Required supplementary information for testing test specimens with organic coatings		
		26
Annex E (informative) Examples of arrangement of the collecting devices.....		
		27
Annex F (informative) Interlaboratory comparison for reference specimens		
		29
F.1	General	29
F.2	Reference specimens.....	29
F.3	Participants of the interlaboratory comparison	29
F.4	Procedure	29
F.4.1	Preparation.....	29
F.4.2	Operation.....	30
F.5	Test results.....	30
Bibliography		
		31