
Corrosion tests in artificial atmospheres — Salt spray tests

*Essais de corrosion en atmosphères artificielles — Essais aux
brouillards salins*



Reference number
ISO 9227:2017(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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
---------------------------	-----------