

CORROSION TESTS

Standard	Formerly	Description	Test duration	Temp. and humidity	Remarks
DIN EN ISO 6270-2 Condensation (in-cabinet exposure with heated water reservoir)	DIN 50 017				
DIN EN ISO 6270-2 CH	DIN 50 017 KK	Condensation constant climate	continuous	40 ± 3°C	Condensation (approx. 100% humidity)
DIN EN ISO 6270-2 AHT	DIN 50 017 KFW	Condensation alternating climate with alternation of air humidity and temperature	8 h 16 h	40 ± 3°C 18–28°C	Condensation (approx. 100% humidity) Chamber opened or ventilated
DIN EN ISO 6270-2 AT	DIN 50 017 KTW	Condensation alternating climate with change of air temperature	8h 16	40 ± 3°C 18–28°C	Condensation (approx. 100% humidity) Chamber closed
DIN EN ISO 9227 NSS Neutral salt spray test	DIN 50 021 SS	Salt spray with 5% NaCl (pH = 6,5 -7,2)	continuous	35 ± 2°C	96 h to 1000 h
DIN EN ISO 9227 AASS Acetic acid salt spray test	DIN 50 021 ESS	Salt spray with 5% NaCl (pH = 3,1 -3,3)	continuous	35 ± 2°C	
DIN EN ISO 9227 CASS Copper accelerated acetic acid salt spray test	DIN 50 021 CASS	Salt spray with 5% NaCl (pH = 3,1 -3,3)	continuous	50 ± 2°C	24 h to 96 h

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ISO 22479 Cyclic corrosion testing with noxious gas	DIN 50 018 DIN EN ISO 6988	Condensed water constant climate with ventilation and atmosphere containing sulfur dioxide	8h	40 ± 3°C	0.2 to 2.0 L SO ₂ to be dosed, depending on the usable chamber volume. Chamber is ventilated
			16	18–28°C	
DIN EN ISO 11997- 1 Cycle B Cyclic corrosion test	VDA 621-415	Salt spray according to DIN EN ISO 9227 NSS	24 h (1 d)	35 ± 2°C	1 cycle = 1 week
		4 cycles according to DIN EN ISO 6270-2 AHT	96 h (4 d)	40°C / (18–28°C)	
		Ventilation (23°C/50% humidity +-20%)	48 h (2 d)	23 ± 2°C	Cycle for weekend
PV 1210 Cyclic corrosion test		Salt spray according to DIN EN ISO 9227 NSS	4 h		Cycle for weekend
		Standard climate	4 h		
		Condensation water according to DIN EN ISO 6270-2 CH	16 h		
		After 5 days: Standard climate	48 h		
DIN EN 60068-2-11 Salt spray test	IEC 68-2-11	Salt spray with 5% NaCl	continuous	35 ± 2°C	16 h to 672 h
DIN EN 60068-2-52 Cyclic corrosion test Sharpness grade 1 Sharpness level 2	IEC 68-2-52	Salt mist (5% NaCl) Moisture storage	2 h	35 ± 2°C	4 weeks
			6 d 22 h	40 ± 2°C / 93%	
			2 h	35 ± 2°C	
		Salt fog (5% NaCl) Humidity storage			3 d

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Sharpness level 3		Salt fog (5% NaCl) Humidity storage After 3 days standard climate	22 h 2 h 22 h to 1 d 72 h	40 ± 2°C / 93% humidity 35 ± 2°C 40 ± 2°C / 93% 23°C, 50%	1 d
Sharpness level 4		2 cycles according to degree of severity 3			
Sharpness level 5		4 cycles after degree of sharpness 3			
Severity level 6		8 cycles according to degree of sharpness 3			
Severity level 7		Salt fog (5% NaCl) Warm drying Humidity storage	2 h 4 h 2 h	35 ± 2°C 60 ± 2°C ≤30% 50 ± 2°C ≥95%	1 cycle = 8 h (3 - 180 cycles)
Severity level 8		like degree of sharpness 7 with acidified salt solution			
SWAAT /PV 1208 ASTM G85 A3 Cyclic corrosion test		Salt spray (5% NaCl) (pH=2.8 to 3) Heating without salt spray	30 min 90 min	50 ± 2°C 50 ± 2°C	Soil remains covered with water Soil remains covered with water
DIN 55635 Cyclic corrosion test	VDA 233-102(Daimler KWT) (SEP 1850)				Cycle consists of B A C A B B A
Cycle A		Salt spray (1% NaCl) Temperature (35°C - 50°C) with humidity change 50-95	3 h 21 h	35 ± 2°C 35-50°C / 50-95%	
Cycle B		Temperature (35°C - 50°C) with humidity change 70-95	24 h	23-50°C / 70-95%	

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Cycle C		Deep cooling (-15°C to + 50°C) Temperature (35°C - 50°C) with humidity change 70-95	9 h 15 h	-15°C 35-50°C / 70-95%	
Volvo VCS 1027, 149STD 423-0014 Volvo VCS 1027, 1449 Ford CETP.00.00 L-467 Cyclic corrosion test		Cyclic corrosion testing with sprinkling and different moisture and drying phases		35-45°C / 50-95% 25-50°C / 70-95%	
SAE J 2334 Cyclic corrosion test		Condensation climate Immersion in (or direct spraying with) salt water at ambient temperature Air drying	6 h 15 min. 17 h 45 min.	50°C / ca. 100% 60°C, 50%	3-part repetition cycle Salt solution: 0.5% NaCl 0.1% CaCl ₂ 0.075% NaHCO ₃ Co-test coupons and determine mass loss for each 20 cycles.