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## **INERTA 270 epoxy coating CHEMICAL RESISTANCE**

The chemical resistance of the coatings was tested in immersion at +20±5°C unless stated otherwise (ISO 2812). The coatings were painted in a system consisting of two INERTA 270 layers, 2 x 160 µm = 320 µm (total dry film thickness). Before painting the steel panels were blast-cleaned to surface preparation grade Sa 21/2 (ISO 8501-1).

Symbol "+" refers to good chemical resistance.

Symbol "-" refers to poor chemical resistance.

Symbol "X years" refers to amount of years the coating showed good chemical resistance.

Symbol "N.A." means that there is no test result for that immersion time.

Tested chemical or solution:		Immersion time				
Solvents	7 days	3 months	1 year	X years		
Acetone	-	-	-	N.A.		
Ethanol, 95%	+	+	+	3		
Ethylene glycol	+	+	+	6		
Glycerol	+	+	+	3		
Iso-propanol	+	+	+	7		
Methanol	-	-	-	N.A.		
Methyl ethyl ketone (MEK)	-	-	-	N.A.		
Methyl isobutyl ketone (MIBK)	+	+	-	N.A.		
Propylene glycol	+	+	+	6		
Toluene	+	+	+	7		
Tetrachloromethane	+	-	-	N.A.		
White Spirit, 15% aromatics	+	+	+	3		
Xylene	+	+	+	N.A.		
Tested chemical or solution:		Immersion time				
Acids and Bases	7 days	3 months	1 year	X years		
Acetic acid 6%	+	-	-	N.A.		
Acetic acid 10%	+	-	-	N.A.		
Citric acid 3%	+	+	+	6		
Citric acid 25%	+	+	+	6		
Phosphoric acid 10%	+	-	-	N.A.		
Sulphuric acid 5%	+	-	-	N.A.		
Ammonia 10%	+	+	-	N.A.		
Ammonia 25%	+	-	-	N.A.		
Ammonium sulphate	+	+	+	6		
Sodium hydroxide 1%	+	+	+	6		
Sodium hydroxide 5%	+	+	+	2		
Sodium hydroxide 10%	+	+	+	N.A.		
Sodium hydroxide 25%	+	+	+	6		
Potassium hydroxide 50%	+	+	+	6		

Tested chemical or solution:	Immersion time				
Water, hydrocarbons and others	7 days	3 months	1 year	X years	
Deionized water	+	+	+	3	
Municipal water	+	+	+	3	
Sea water	+	+	+	3	
Water, 5% NaCl solution	+	+	+	3	
Water, 30% NaCl solution	+	+	+	3	
Aviation petrol	+	+	+	11	
Crude oil	+	+	+	3	
Diesel Oil	+	+	+	3	
Engine oil	+	+	+	3	
Heating oil	+	+	+	3	
Jetfuel	+	+	+	3	
Lead-free gasoline	+	+	+	3	
Leaded gasoline	+	+	+	3	
Linseed oil	+	+	+	8	
Vegetable oil	+	+	+	3	
Fertilizers dry	+	+	+	3	
Fertilizer 25% solution (NH4) <sub>2</sub> SO <sub>4</sub> , NH <sub>4</sub> NO <sub>3</sub> ,(NH <sub>2</sub> ) <sub>2</sub> CO	+	+	+	6	
Sewage waste water	+	+	+	2	
Tested chemical or solution:	Immersion time				
High temperature immersion,+70°C	7 days	3 months	1 year	X years	
Ethyl glycol, 100%	+	+	-	N.A.	
Fatty acids (75-80% oleic acid)	+	+	-	N.A.	
NH₄OH, 10% solution	_	_	_	N.A.	
NH₄Cl (saturated solution)	+	+	_	N.A.	
Rokafenol N-9, 10%	+	+	_	N.A.	
Sulphuric acid, 5%	_	_	-	N.A.	
Sulphuric acid, 10%	-	-	-	N.A.	
Sodium hydroxide, 5%	+	-	-	N.A.	
Sodium hydroxide, 20%	+	+	-	N.A.	
Tested chemical or solution:	Immersion time				
High temperature immersion,+100°C	7 days	3 months	1 year	X years	
Deionized water	+	-	-	N.A.	

