

Material Resistance Reflectors **InoxSens**



Introduction

Testing for chemical stressing of the materials under examination was conducted on a laboratory scale. The test results reveal that the material under examination is resistant to a broad range of chemical substances. This material resistance table is only valid for materials which have the same composition as the submitted test material.

Explanation of utilized symbols:

- + Suitable
 - o Conditionally suitable
 - Not suitable
 - * Contains nitric acid
-
- 0 No change
 - 1 Minimal change (description required)
 - 2 Significant change (description required)
 - a) Lysoformin® 3000 (ingredients: glyoxal, glutaral, didecyldimethylammonium chloride)
 - b) Bio Tec Spüli (ingredients: alkyl benzene sulfonate, alkyl ether sulfate)

ECOLAB Cleaning Agent – Resistance of InoxSens Reflectors

Execution:

- InoxSens reflectors are laid into various cleaning solutions and cleaning concentrates.
- Temperature: 60°C or 80°C (same suitability 20 °C)
- Duration: 2 weeks
- The reflectors are rinsed with deionized water after two weeks, and are optically and gravimetrically evaluated.

Product / Concentration	T [°C]	Suitability
P3-cosa CIP 72	60	+
P3-cosa CIP 77	80	+
P3-cosa CIP 90	80	+
P3-cosa CIP 92	80	+
P3-cosa CIP 95	80	+
P3-cosa PUR 80	80	+
P3-cosa PUR 83	80	+
P3-cosa PUR 84	80	+
P3-cosa PUR 85	80	+
P3-cosa PUR 88	80	+
P3-cosa FOAM 40	80	+
P3-cosa DES	60	+
P3-cosa FLUX 22	80	+
P3-cosa FLUX 33	80	+
P3-cosa FLUX 44	80	+
P3-cosa FLUX 55*	80	o

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InoxSens Reflectors – Evaluation by TÜV Rhineland

Tested Liquid	Substance Group / Ingredients	Evaluation after (condition, color)		
		1 day	7 days	14 days
Acetaldehyde	Aldehydes	0	0	0
Acetone	Ketones	1 (softening of the surface)	1 (softening of the surface)	1 (softening of the surface)
Formic acid	Organic acids	0	0	0
Benzene	Aromatic hydrocarbons	0	0	1 (opacity)
1,3 butane dioles	Polyalcohols	0	0	0
Butylamine	Amines	0	0	0
Chlorobenzene	Chlorinated aromatic hydrocarbons	0	0	0
Choroform	Chlorinated hydrocarbons	0	0	0
Chlorosulfuric acid	Acid chlorides	0	0	0
Diesel fuel	Fuels	0	0	0
Diethyl ether	Ethers	0	0	0
Dimethyl formamide	Amides	0	0	0
Dimethyl sulfate	Esters	0	0	0
Glacial acetic acid	Organic acids	0	0	1 (minimal cracks)
Acetic acid, 10%	Organic acids	0	0	0
Ethanol	Alcohols	0	0	1 (minimal color change)
Ethylene glycol	Polyalcohols	0	0	0
Formaldehyde, 37%	Aldehydes	0	0	0
Fuel oil EL	Fuels	0	0	0
Isopropanol	Alcohols	0	0	0
Kerosene	Fuels	0	0	0
m-Cresol	Phenols	0	0	0
Methanol	Alcohols	0	0	1 (opacity)
n-Heptane	Hydrocarbons	0	0	0
Sodium hydroxide solution, 10%	Lyes	0	0	0
Hydrochloric acid, 20%	Inorganic acids	0	0	0
Sulfuric acid, 98%	Inorganic acids	0	0	0
1,1,2,2 Tetrachlorethane	Chloridized hydrocarbons	0	0	0
Carbon tetrachloride	Chloridized hydrocarbons	0	0	0
Toluol	Aromatic hydrocarbons	0	0	0
Hydrogen peroxide (H ₂ O ₂), 10%		0	0	0
Cleaning agent, medical ^{a)}		0	0	0
Cleaning agent, food ^{b)}		0	0	0

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2 = Significant change (description required)

^{a)} = Lysoformin® 3000 (ingredients: glyoxal, glutaral, didecyltrimethylammonium chloride)
^{b)} = Bio Tec Spüli (ingredients: alkyl benzene sulfonate, alkyl ether sulfate)

Measured values were taken from the test report issued by TÜV Rhineland (test no. 620/ 434628).