

# **MATERIAL** COMPARISON



**MONOLITE**  
**IPERGRES**

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TECHNICAL CERAMIC

# Material comparison

SAMPLE NO.		NAME OF SURFACE SAMPLE OR MATERIAL TESTED								
		CERAMIC				PLASTIC				
		1	2	3	4	5	6	7	8	9
No. of	Chemical reagent	Monolite Ipergres Ceramic	KS-12 Ceramic - glossy enamel	KS-12 Ceramic - mat enamel	Quarella Ceramic	Sloplast Plastic	Trespa Top Lab Plastic	Wilsonart Plastic	Labolam Plastic	Isomax Plastic
1.	Nitric acid, concentrated 65%	Green	Green	Green	Green	Yellow	Green	Orange	Orange	Orange
2.	Nitric acid, diluted 10%	Green	Green	Green	Green	Yellow	Green	Orange	Orange	Orange
3.	Sulphuric acid, concentrated 96%	Green	Green	Green	Red	Green	Yellow	Red	Orange	Orange
4.	Sulphuric acid, diluted 10%	Green	Green	Green	Green	Green	Green	Orange	Orange	Orange
5.	Nitric and sulphuric acids, concentr.1:3	Green	Green	Green	Red	Green	Orange	Red	Orange	Orange
6.	Hydrofluoric acid (37%)	Orange	Orange	Orange	Orange	Yellow	Green	Orange	Green	Green
7.	Hydrochloric acid, concentrated 37%	Green	Green	Green	Green	Orange	Green	Orange	Orange	Orange
8.	Hydrochloric acid, diluted 10%	Green	Green	Green	Green	Orange	Green	Orange	Orange	Orange
9.	Phosphoric acid (73%)	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Yellow
10.	Chromic acid (60%)	Green	Yellow	Yellow	Green	Yellow	Green	Orange	Green	Green
11.	Sodium dichromate	Green	Green	Green	Green	Green	Green	Green	Green	Yellow
12.	Potassium dichromate (concentrated sulphuric acidsolution)	Green	Green	Yellow	Green	Yellow	Green	Yellow	Green	Green
13.	Ammonia (28%)	Green	Green	Green	Green	Green	Green	Orange	Green	Green
14.	Trichloroacetic acid	Green	Green	Green	Green	Green	Green	Orange	Green	Green
15.	Acetic acid, glacial	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green
16.	Hydrogen peroxide (33%)	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green
17.	Sodium hydroxide (50%)	Green	Green	Green	Green	Green	Green	Green	Green	Green
18.	Sodium hydroxide (10%)	Green	Green	Green	Green	Green	Yellow	Green	Green	Green
19.	Potassium hydroxide (50%)	Green	Green	Green	Green	Green	Yellow	Orange	Green	Green
20.	Potassium hydroxide (10%)	Green	Green	Green	Yellow	Green	Yellow	Green	Green	Green
21.	Acetone	Green	Green	Green	Green	Green	Green	Green	Green	Green
22.	Toluene	Green	Green	Green	Green	Green	Green	Green	Green	Green
23.	Hexane	Green	Green	Green	Green	Green	Green	Green	Green	Green
24.	Dioxane	Green	Green	Green	Green	Green	Green	Green	Green	Green
25.	Butyl acetate, mineral spirits, o-xylol (1:1:1)	Green	Green	Green	Green	Green	Green	Green	Green	Green
26.	Benzene	Green	Green	Green	Green	Green	Green	Green	Green	Green
27.	DICHLOROATHANE (10%)	Green	Green	Green	Green	Green	Green	Yellow	Green	Green
28.	DICHLOROATHANE (20%)	Green	Green	Green	Green	Green	Green	Green	Green	Green
29.	Carboxylic acid, phenol (90%)	Green	Green	Green	Green	Green	Green	Green	Green	Green
30.	Methyl ethyl ketone	Green	Green	Green	Green	Green	Green	Green	Green	Green
31.	Carbon tetrachloride	Green	Green	Green	Green	Green	Green	Green	Green	Green
32.	Dimethylformamide	Green	Green	Green	Green	Green	Green	Green	Green	Green
33.	Potassium permanganate solution	Green	Orange	Yellow	Orange	Orange	Yellow	Orange	Orange	Orange
34.	Iodine solution	Green	Orange	Green	Orange	Orange	Orange	Orange	Orange	Orange
35.	Bromine phenol blue (0,1%)	Green	Orange	Green	Orange	Green	Green	Yellow	Orange	Orange
36.	Methyl red (0,1%)	Green	Orange	Green	Orange	Orange	Yellow	Yellow	Orange	Orange
37.	Methyl orange (0,1%)	Green	Orange	Green	Orange	Orange	Green	Yellow	Orange	Orange
38.	Methyl blue (0,1%)	Green	Orange	Orange	Orange	Yellow	Orange	Yellow	Orange	Orange
39.	Phenolphthalein (0,1%)	Green	Orange	Orange	Orange	Green	Green	Yellow	Green	Green
	Abrasion resistance (scratch)	Green	Green	Green	Green	Yellow	Yellow	Orange	Yellow	Yellow
	Shock resistance	Green	Green	Green	Green	Green	Green	Green	Green	Green
	100 C°	Green	Green	Green	Green	Green	Green	Green	Green	Green
	150 C°	Green	Green	Green	Green	Green	Green	Green	Green	Green
	200 C°	Green	Green	Green	Green	Yellow	Orange	Orange	Orange	Orange
	300 C°	Green	Green	Green	Green	Orange	Red	Red	Red	Red

NAME OF SURFACE SAMPLE OR MATERIAL TESTED											
COMPOUNDS			OTHER MATERIALS								
10	11	12	13	14	15	16	17	18	19	20	21
Labgrade Plastic	Durcon epoxy compound	Krizopol epoxy compound	Glassfiber Reinforced Plastic	Polypropylene	Lexan polycarbonate	Stainless steel	Varnished Metal	Glossy Laminate	Mat Laminate	Puhos white waterproof melamine	Glass
Red	Orange	Yellow	Green	Green	Green	Green	Red	Yellow	Orange	Red	Green
Orange	Orange	Yellow	Green	Green	Green	Green	Red	Yellow	Orange	Red	Green
Yellow	Green	Green	Green	Green	Green	Red	Green	Yellow	Orange	Red	Green
Orange	Orange	Orange	Orange	Yellow	Green	Green	Red	Yellow	Orange	Red	Orange
Orange	Green	Yellow	Green	Green	Green	Orange	Green	Yellow	Orange	Red	Green
Yellow	Green	Green	Green	Green	Green	Orange	Green	Yellow	Orange	Red	Green
Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Orange	Yellow	Green
Green	Orange	Yellow	Orange	Green	Green	Orange	Orange	Orange	Orange	Yellow	Green
Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Orange	Orange	Green
Green	Green	Yellow	Orange	Green	Green	Green	Yellow	Yellow	Orange	Orange	Green
Yellow	Orange	Yellow	Yellow	Yellow	Yellow	Green	Red	Yellow	Orange	Yellow	Green
Green	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Orange	Yellow	Green
Green	Green	Green	Orange	Yellow	Green	Green	Green	Green	Green	Green	Green
Green	Green	Yellow	Orange	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Green
Green	Green	Yellow	Orange	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Green
Green	Yellow	Orange	Red	Green	Red	Green	Orange	Green	Green	Green	Green
Green	Yellow	Orange	Green	Orange	Red	Green	Orange	Green	Green	Green	Green
Green	Yellow	Yellow	Red	Yellow	Red	Green	Orange	Green	Green	Green	Green
Green	Green	Yellow	Green	Green	Red	Green	Orange	Green	Green	Green	Green
Green	Green	Yellow	Red	Green	Red	Green	Red	Green	Green	Green	Green
Yellow	Orange	Orange	Yellow	Green	Yellow	Green	Yellow	Orange	Orange	Orange	Green
Orange	Green	Orange	Orange	Yellow	Green	Green	Orange	Yellow	Orange	Orange	Green
Orange	Yellow	Orange	Orange	Green	Green	Green	Orange	Yellow	Orange	Orange	Green
Orange	Yellow	Orange	Yellow	Green	Yellow	Green	Yellow	Green	Orange	Orange	Green
Orange	Green	Green	Green	Green	Green	Green	Green	Green	Orange	Orange	Green
Orange	Yellow	Yellow	Yellow	Red	Yellow	Green	Yellow	Orange	Orange	Orange	Green
Green	Green	Green	Green	Orange	Yellow	Green	Green	Orange	Orange	Orange	Red
Green	Green	Green	Green	Green	Yellow	Green	Green	Orange	Orange	Orange	Green
Orange	Yellow	Yellow	Green	Green	Orange	Green	Yellow	Green	Orange	Orange	Green
Red	Yellow	Orange	Orange	Green	Red	Green	Yellow	Green	Green	Green	Green
Orange	Green	Green	Green	Green	Orange	Green	Green	Green	Orange	Orange	Green
Red	Yellow	Orange	Orange	Green	Red	Green	Yellow	Green	Green	Green	Green

● perceivable cracks on the surface  
● stain  
● slightly visible stain  
● no visible effect