PROFESSIONAL LEONARDO OIL COLORS with ALKYD RESIN TECHNICAL INFORMATION

FORMULATED WITH THE MOST PERMANENT (LIGHTFAST) PIGMENTS

CONFORM TO ASTM D-4302

Please see legends at bottom of table

HEALTH LABELING CONFORMS TO ASTM D-4236

COL	COLOR	S	LF	COLOR	COLOR	COMMON	CHEMICAL	T/ST	TX
No.	NAME			INDEX	INDEX	NAME	CLASS	0/S0	
				NAME	NUMBER				
301	Aqua Blue	2	I	PB 27	77510	Prussian Blue	Ferriammonium ferricianide	0	
				PW 6	77891	Titanium White	Titanium Dioxide		
302	Alizarin Crimson (Quinacridone)	3	1	PV 19	73900	Quinacridone Violet	Quinacridone violet	ST	
305	Burnt Sienna	1	I	PBr 7	77491	Burnt Sienna	Calcined natural iron oxide	ST	
306	Burnt Umber	1	I	PBr 7	77491	Burnt Umber	Calcined natural iron oxide with Mn	SO	
308	Cadmium Orange	4	I	PO 20	77202	Cadmium Orange	Concentrated cadmium sulfo-selenide	0	Cd
				PY 35	77205	Cadmium Yellow	Concentrated cadmium zinc sulfide		Cd
312	Cadmium Red Light	5	1	PR 108	77202	Cadmium Red Light	Concentrated cadmium seleno sulfide	0	Cd
316	Cadmium Yellow Medium	4	- 1	PY 35	77205	Cadmium Yellow Medium	Concentrated cadmium zinc sulfide	0	Cd
317	Cadmium Yellow Light	4	I	PY 35	77205	Cadmium Yellow Light	Concentrated cadmium zinc sulfide	0	Cd
330	Cerulean Blue (Hue)	2	1	PB 27	77510	Prussian Blue	Ferriammonium ferricianide	SO	
				PW 6	77891	Titanium White	Titanium dioxide		
334	Cobalt Blue	5	- 1	PB 28	77346	Cobalt Blue	Oxides of cobalt and aluminium	T	Со
345	Hansa Yellow Light	3	II	PY 3	11710	Arylide Yellow 10G	Arylide Yellow	ST	
349	Ivory Black	1	ı	PBk 6	77266	Lamp Black	Nearly pure amorphous carbon	ST	
360	Olive Green	3	- 1	PG 7	74260	Phthalo Green	Chlorinated copper phthalocyanine	SO	
				PBr 7	77491	Burnt Umber	Calcined natural iron oxide with Mn		
361	Payne's Gray	2	I	PBk 6	77266	Lamp Black	Nearly pure amorphous carbon	ST	
				PB 29	77007	Ultramarine Blue	Silicate of Na and Al with sulphur		
365	Permanent Red	3	I	PR 188	12467	Napthol AS	Napthol AS	ST	
367	Phthalo Blue	3	I	PB 15	74160	Phthalocyanine Blue	Phthalo blue	Т	
368	Phthalo Green	3	I	PG 7	74260	Phthalo Green	Chlorianted copper phthalocyanine	Т	
371	Prussian Blue	2	I	PB 27	77510	Prussian Blue	Ferriammonium ferricianide	Т	
373	Raw Sienna	1	I	PBr 7	77491	Raw Sienna	Natural iron oxide	ST	
374	Raw Umber	1	I	PBr 7	77491	Raw Umber	Natural iron oxide containing Mn	SO	
376	Red Rose Deep (Quinacridone)	4	ı	PV 19	73900	Quinacridone Violet	Quinacridone violet	Т	
379	Sap Green	3	ı	PG 7	74260	Phthalo Green	Chlorinated copper phthalocyanine	ST	
				PY 42	77492	Iron Oxide Yellow	Hydrated iron oxide		
380	Thioindigo Violet	4	I	PR 88	73312	Thioindigoid Violet MRS	Thioindigoid	ST	
382	Titanium White	1	I	PW 6	77891	Titanium White	Titanium dioxide	0	
				PW 4	77947	Zinc White	Zinc oxide		
384	Ultramarine Blue	2	I	PB 29	77007	Ultramarine Blue	Silicate of Na and Al with sulphur	T	
388	Venetian Red	1	I	PR 101	77491	Venetian Red	Iron oxide	0	
390	Viridian Green	3	I	PG 18	77289	Viridian	Hydrous chromium sesquioxide	T	Cr
392	Yellow Ochre	1	Ī	PY 43	77492	Yellow Ochre	Natural hydrated iron oxide	SO	

Legend	Definition
S	Series Number
LF I	Lightfastness Excellent (as per ASTM D-5067)
LF II	Lightfastness Very Good (as per ASTM D-5067)

Legend	Definition	Comments
T	Transparent	
ST	Semi-Transparent	
0	Opaque	
SO	Semi-Opaque	
Tx	Toxic	Cd = cadmium, Co = cobalt, Cr = Chromium

BINDER: PURE CLASSIC LINSEED OIL COMBINED WITH ALKYD RESIN HAS BEEN USED IN THE MANUFACTURE OF "LEONARDO" ARTISTS' OILS. SAFFLOWER OIL HAS BEEN USED FOR THE COLOR "TITANIUM WHITE" INSTEAD OF LINSEED OIL, IN ORDER TO REDUCE THE YELLOWING EFFECT ON AGING.

DRYING TIME: BECAUSE OF ITS ALKYD RESIN CONTENTS, "LEONARDO" OILS DRY FASTER THAN REGULAR OILS, BUT NOT AS FAST AS PURE "ALKYD COLORS".

FOR A FASTER DRYING: USE "LEONARDO" OILS IN COMBINATION WITH "DA VINCI" LIQUID-ALKYD MEDIUM.

DO NOT ADD ANY DRIER: ADEQUATE QUANTITIES OF A COMBINATION OF DRIERS HAVE BEEN ADDED TO THE COLORS THAT NEEDED IT. THE INTRODUCTION OF ADDITIONAL DRIERS MAY CAUSE OVERACTIVITY AT THE FILM SURFACE PRODUCING A DRIED THIN SKIN BUT LEAVING THE PAINT UNDERNEATH INDEFINITELY WET, WITH THE RESULTANT WRINKLING OR REDUCTION OF FILM DURABILITY.

THE "LEONARDO" ARTISTS' OIL COLORS DO NOT CONTAIN ANY SOLVENT.

TO AVOID THE USE OF ANY SOLVENT WHILE PAINTING, USE "DA VINCI" LINSEED OR SAFFLOWER OILS TO DILUTE THE COLORS IF NEEDED. THESE PAINTING MEDIUMS ARE MADE OUT OF NON-EDIBLE VEGETABLE DRYING OILS.

<u>DO NOT USE EDIBLE SAFFLOWER OIL</u> TO DILUTE THE COLORS BECAUSE IT WILL NOT DRY.

BRUSHES CAN BE CLEANED WITH "DA VINCI" LINSEED OR SAFFLOWER OILS WHILE PAINTING, AND WITH SOAP AND WATER FOR STORAGE AFTER USE.