



# MICHAEL HARDING ARTISTS OIL COLOURS



## COLOURS



Colour swatches are provided to give a visual representation of the actual paint colours as best as the printing process can achieve.

SERIES	COLOUR INDEX NO	DRYING	TRANSPARENCY	LIGHTFASTNESS	OIL CONTENT	TINT POWER	TOXICITY	
SERIES 1	101 Titanium White No.1 (Safflower Oil)	PW 6, PW 4	Very slow	Very opaque	Excellent	Very low	High	Non-Toxic
	102 Titanium White No.2 (Linseed Oil)	PW 6, PW 4	Average	Very opaque	Excellent	Very low	High	Non-Toxic
	103 Zinc White	PW 4	Slow	Slightly	Excellent	Very low	Average	Non-Toxic
	108 Lemon Yellow	PY 31	Slow	Opaque	Excellent	Very low	Low	Toxic
	109 Bright Yellow Lake	PY 3	Slow	Transparent	Very Good	High	High	Non-Toxic
	110 Yellow lake	PY 74	Slow	Transparent	Very Good	High	High	Non-Toxic
	112 Prussian Blue	PB 27	Very fast	Transparent	Very Good	High	High	Non-Toxic
	113 Ultramarine Blue	PB 29	Average	Transparent	Excellent	Average	Average	Non-Toxic
	114 Phthalocyanine Blue & Zinc White	PB 15.3, PW 4	Average	Slightly	Excellent	Low	Average	Non-Toxic
	115 Terre Verte	PG 23	Fast	Transparent	Excellent	High	Very Low	Non-Toxic
	116 Bright Green Lake	PY 74, PG 7	Average	Transparent	Very Good	High	High	Non-Toxic
	117 Unbleached Titanium Dioxide	PW 6.1	Fast	Opaque	Excellent	Low	High	Non-Toxic
	118 Yellow Ochre Deep	PY 43	Very fast	Semi-transparent	Excellent	Average	Average	Non-Toxic
	119 Yellow Ochre	PY 42	Very fast	Semi-transparent	Excellent	Average	Average	Non-Toxic
	120 Raw Sienna	PB 7	Very fast	Semi-transparent	Excellent	Average	Average	Non-Toxic
121 Raw Umber	PB 6	Very fast	Semi-transparent	Excellent	Average	Average	Non-Toxic	
122 Venetian Red	PR 101	Very fast	Semi-opaque	Excellent	Average	Low	Non-Toxic	
123 Indian Red	PR 101	Very fast	Semi-opaque	Excellent	Average	High	Non-Toxic	
124 Red Umber	PB 6	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
125 Burnt Sienna	PB 7	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
126 Burnt Umber	PB 6	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
127 Paynes Grey	PBk 9, PB 29, PY 42	Average	Semi-transparent	Excellent	High	High	Non-Toxic	
128 Lamp Black	PBk 6	Average	Semi-opaque	Excellent	High	Average	Non-Toxic	
129 Ivory Black	PBk 9	Average	Transparent	Excellent	High	Average	Non-Toxic	
130 Titanium White No.3 (Linseed Oil)	PW 6, PW 4	Average	Very opaque	Excellent	Very Low	High	Non-Toxic	
132 Indian Green Umber	PB 7	Fast	Semi-transparent	Excellent	Average	Average	Non-Toxic	
133 French Yellow Ochre	PY 43	Fast	Semi-transparent	Excellent	Average	Average	Non-Toxic	
134 Vandyke Brown	PB 7	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
135 Vine Black	PBk 11	Fast	Semi-opaque	Excellent	High	Average	Non-Toxic	
136 Neutral Grey	PW 4, PW 6, PBk6, PB 6	Average	Opaque	Excellent	Very Low	High	Non-Toxic	
SERIES 2	202 Yellow Lake Deep	PY 1.1	Slow	Transparent	Very Good	High	Average	Non-Toxic
	203 Indian Yellow	PY 83	Average	Transparent	Very Good	High	Average	Non-Toxic
	204 Indian Yellow Red Shade	PY 83, PR 101	Fast	Transparent	Very Good	High	Average	Non-Toxic
	205 Scarlet Lake	PR 170	Average	Semi-opaque	Excellent	High	High	Non-Toxic
	207 Brilliant Pink	PR 209, PW 4, PW 6	Average	Opaque	Excellent	Low	Average	Non-Toxic
	208 Ultramarine Violet	PV 15	Average	Transparent	Excellent	Average	Average	Non-Toxic
	209 Phthalocyanine Blue Lake	PB 15.3	Fast	Transparent	Excellent	High	High	Non-Toxic
	210 Phthalocyanine Turquoise	PB 15.3, PG 7, PW 6, PW 4	Average	Opaque	Excellent	Low	Average	Non-Toxic
	211 Kings Blue Light	PB 29, PW 6, PW 4	Average	Opaque	Excellent	Low	Average	Non-Toxic
	212 Kings Blue Deep	PB 29, PW 6, PW 4	Average	Opaque	Excellent	Low	Average	Non-Toxic
	213 Phthalocyanine Green Lake	PG 7	Fast	Transparent	Excellent	High	High	Non-Toxic
	214 Phthalocyanine Green Yellow Shade	PG 36	Average	Transparent	Excellent	High	High	Non-Toxic
	215 Permanent Green Light	PG 36, PW 6, PW 4, PY 3	Average	Opaque	Excellent	Low	Average	Non-Toxic
	216 Emerald Green	PG 7, PW 6, PW 4, PY 3	Average	Fast	Excellent	Low	Average	Non-Toxic
	217 Permanent Sap Green	PG 7, PB 6	Fast	Semi-opaque	Excellent	High	High	Non-Toxic
218 Naples Yellow	PB 24	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
219 Transparent Oxide Yellow	PY 42	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
220 Transparent Oxide Red	PR 101	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	
222 Permanent Orange	PO 73	Average	Semi-opaque	Excellent	High	High	Non-Toxic	
223 Indian Brown Ochre	PY 42	Fast	Semi-opaque	Excellent	Average	Average	Non-Toxic	
224 Transparent Oxide Brown	PR 101	Very fast	Transparent	Excellent	Average	Average	Non-Toxic	

SERIES 3	301 Naphthol Red	PR 188	Average	Semi-opaque	Excellent	High	High	Non-Toxic	
	302 Alizarin Crimson	PR 83	Slow	Transparent	Good	High	Average	Non-Toxic	
	303 Magenta	PR 122	Average	Transparent	Excellent	High	Average	Non-Toxic	
	304 Manganese Violet	PV 16	Average	Semi-opaque	Excellent	Average	Average	Non-Toxic	
	305 Oxide of Chromium	PG 17	Average	Opaque	Excellent	Average	Average	Non-Toxic	
	307 Cremnitz No.1 (Walnut Oil)	PW 1	Average	Opaque	Excellent	Very low	Average	Toxic	
	308 Cremnitz No.2 (Linseed Oil)	PW 1	Average	Opaque	Excellent	Very low	Average	Toxic	
	309 Amethyst	PB 29, PR 122, PV 23	Average	Transparent	Excellent	High	Average	Non-Toxic	
	SERIES 4	401 Cadmium Yellow Lemon	PY 35	Fast	Opaque	Excellent	Low	Average	Non-Toxic
402 Cadmium Yellow		PY 35	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
403 Cadmium Golden Yellow		PY 35	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
404 Cadmium Yellow Deep		PO 29	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
406 Crimson Lake		PR 149	Average	Transparent	Excellent	High	Average	Non-Toxic	
SERIES 5		501 Aureolin	PY 40	Average	Transparent	Excellent	Average	Average	Non-Toxic
	502 Cadmium Orange	PO 20	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
	503 Cadmium Red Light	PR 108	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
	504 Cadmium Red	PR 108	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
	505 Cadmium Red Deep	PR 108	Fast	Opaque	Excellent	Low	Average	Non-Toxic	
	506 Cobalt Blue	PB 28	Very fast	Semi-opaque	Excellent	Low	Average	Non-Toxic	
	507 Cobalt Turquoise Deep	PB 36	Fast	Semi-opaque	Excellent	Low	Average	Non-Toxic	
	508 Cobalt Green Deep	PG 19	Average	Semi-transparent	Excellent	Average	Average	Non-Toxic	
	511 Viridian	PG 18	Very fast	Semi-transparent	Excellent	High	Average	Non-Toxic	
	512 Lead Tin Yellow Light	Type 1	Very fast	Opaque	Excellent	Very low	Average	Toxic	
	513 Cobalt Teal	PG 50	Fast	Semi-opaque	Excellent	Low	Average	Non-Toxic	
	514 Lead Tin Yellow Lemon	Type 1	Very fast	Opaque	Excellent	Very low	Average	Toxic	
	515 Rose Madder	NR 9	Slow	Transparent	Good	High	Average	Non-Toxic	
	SERIES 6	601 Cobalt Violet Light	PV 14	Fast	Semi-opaque	Excellent	Average	Average	Non-Toxic
		602 Cobalt Violet Dark	PV 14	Fast	Semi-opaque	Excellent	Average	Average	Non-Toxic
603 Cerulean Blue		PB 36	Average	Opaque	Excellent	Low	Average	Non-Toxic	
605 Genuine Naples Yellow Light		PY 41	Very fast	Opaque	Excellent	Very low	Average	Toxic	
606 Genuine Naples Yellow Dark		PY 41	Very fast	Opaque	Excellent	Very low	Average	Toxic	
607 Stack Lead White		PW 1	Very fast	Opaque	Excellent	Very low	Average	Toxic	
SERIES 7		701 Genuine Vermilion	PR 106	Average	Very opaque	Excellent	Very Low	Average	Toxic
	702 Lapis Lazuli (Alghian)	PB 29	Average	Semi-transparent	Not tested	Average	Low	Non-Toxic	

## MEDIUMS & VARNISHES

### V1 - Dammar Varnish

This versatile varnish creates a subtle gloss finish. Michael Harding's Dammar Varnish is made with the best quality dammar resin from Thailand dissolved in double-rectified Portuguese maritime turpentine, then carefully filtered. Apply as a final picture varnish to thoroughly dried oil paint, after six months minimum drying time. If paint is very thick, wait one year.

### V2 - Matt Varnish

Matt varnish creates a long lasting protective coating with a beautiful matt finish. It is made from real beeswax dissolved in the finest Portuguese maritime turpentine. Before using, heat the container with warm water until the contents turn clear. Then apply one thin coat which dries within minutes. Apply this varnish as a final picture varnish to thoroughly dried oil paint. It is important to ensure at least six months time has passed before applying the varnish. If oil paint is very thick, wait one year.

### PM1 - Oil Paint Medium

Oil paint medium is a basic paint medium designed to ease flow and increase gloss, transparency, depth and beauty of the pigment colour. This medium is a linseed stand oil and Portuguese maritime turpentine formulation that prevents yellowing of paint films.

### PM2 - Dammar Glaze Medium

A traditional glaze medium that adds depth and gloss to transparent colours. Dammar glaze medium is known for its speedy drying time of oil colours; use with slower-drying colours. Please note this is one of the only products containing driers ensuring reasonable drying within a day or two.

### PM3- Resin Oil Wax Medium

This resin oil wax medium is a soft painting paste, derived from pure bleached beeswax then mixed with dammar resin and linseed stand oil. This popular medium creates a satin sheen and gentle impasto in paint layers. Settling of the medium may occur. Before using, allow the jar to stand in hot water, and stir or shake the contents until dissolved and clear.

### PM4 - Beeswax Paste

Beeswax paste is a high oil content paste based on linseed stand oil and pure bleached beeswax. This paste increases the body of oil colour with satin-matt finish which is especially useful with opaque colours.

### PM5 - Oleo Resin Medium

Oleo resin medium is a historic glaze medium based on light coloured Canada balsam combined with dammar resin and linseed stand oil. This versatile medium provides high gloss levels while imparting depth to paint films.

### PM6 - Balsam Resin Glaze Medium

Another historic paint medium, based on Austrian larch turpentine (also known as Venice turpentine) made with dammar resin and linseed stand oil. This wonderful-smelling medium can be added to oil colours to enhance depth, gloss and lustre.



Note, all Michael Harding mediums contain only the finest grade of genuine Portuguese Maritime Turpentine.



### Painter Michael Harding founded Michael Harding Art Materials Ltd. in 1982 because he felt compelled to.

While he attended art college in London, Harding kept trying to replicate the paint vibrancy and surface of Rembrandt's works. But these qualities were not possible to achieve with commercially available oil paints, which almost seemed like a different medium altogether. So Harding exhaustively researched the methods and techniques used to create the Old Masters oil paints. And he began to grind his own.

With a growing sense of discovery, over time Harding succeeded in building and replicating the colours and brush-out qualities of the Old Masters oil paints. He leapt forward as an artist. And friends noticed, borrowing some of his paints, coming back for more, seeing their own work improve. They had breakthroughs too and their material was sincere and more vibrant. Within weeks, word of mouth spread. The Victoria & Albert museum and other notable British institutions contacted Harding. "Everyone wanted these paints."

So Harding went into business and began to make paints in earnest. Demand grew and grew. Today, Michael Harding's artist oil colours ship to twenty-seven countries, where they are used by thousands of notable artists.



### THE MICHAEL HARDING DIFFERENCE

In the words of George Gallo, "Never have colors been available like these before with pigment loading and color chroma, it's like painting with light!"

The Michael Harding range contains superb, modern lightfast and ancient oil colours. All of Michael Harding handmade oil paints have incredible tint, concentration and saturation power unlike any other oil paint. Pigments are finely ground with steel or stone mills, according to the pigment's properties. The painstakingly created pigments, the finest oils, and a touch of beeswax for just a few colours are blended to a buttery, harmonious texture that create the luminous colours and chroma unique to Michael Harding's Artist Oil Colours. No fillers are used, which maximizes coverage and lightfastness, ensuring colours remain luscious over time. These powerful oil paints have the highest concentration of pigment available today. And artists can be assured of the paint's longevity because the pigments resist fading by UV light and the oil delivers exceptional film strength.

Their coveted handmade "Old Master" formula paints are available in these colours: Hand Made Stack Lead White, Genuine Vermilion, Lapis Lazuli, Genuine Naples Light and Dark, Lead Tin Yellow Light and Lemon, Rose Madder, Burnt and Raw Sienna, Terre Verte, Vandyke Brown, Italian Brown Ochre, French Yellow Ochre and Italian Green Umber. In all there are 100 colours of both ancient and modern pigments.

Michael Harding tubes have a real colour strip on the label so the artist knows exactly how the oil paint will look on the canvas. Every label contains essential information such as drying speed, type of oil, tint power, and the colour index number(s) showing the pigment identity and confirming its lightfastness.

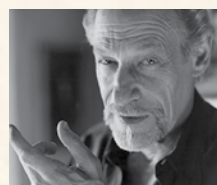
Through meticulous craftsmanship, Michael Harding artist oil colours are made with the highest integrity.

### HERE'S WHAT THEY HAVE TO SAY.



#### ■ JEREMY LIPKING

"Michael Harding paints work perfectly for getting the **color and edges** that I want in my paintings."



#### ■ DAVID LEFFEL

"In all these many years I have been painting...I could never produce a white which would enable me to achieve the paint quality I sought. And now a new door is opened—stack white! This white allows an artist—any artist—long limpid descriptive brushwork, **brushstrokes that reveal the workings and understandings of the mind behind the hand.** The long supple quality of stack white that allowed Rembrandt the freedom and expressiveness that enralls us to this day is, at last, at hand."



#### ■ ALEXEY STEELE

"Michael Harding are paints of rare combination of **strength and elegance.** Cheers to great paints!"



#### ■ TONY PRO

"Of all the brands of paint I have used, Michael Harding's paint takes the prize with its perfect consistent behavior and **amazing pigment quality.** I'm hooked!"



#### ■ CW MUNDY

"These Michael Harding paints that I'm using are doing exactly what he said - they're **changing my life!**"



#### ■ GEORGE GALLO

"The Paint is just marvelous. I can't believe how great the warms are and how the cools lay back. **It makes me feel like I've been painting with mud until now.** This isn't a pitch, its the truth; the paints have literally made me a better artist. They are like painting with light."

#### MAKING STACK LEAD WHITE

Michael Harding himself creates small handmade batches of Stack Lead White following the time-honored techniques used to make the world's most famous and enduring oil paint.

Many art historians have noticed there is something in the nature of the Old Masters oil paints—particularly in whites—which cannot be replicated with today's paints because the method for making them has changed. To recreate the actual white pigment that would have been familiar to Rembrandt, Titian and Vermeer to name a few, Michael Harding has researched lead whites and the old Dutch stack process for many years. Prior to the industrial revolution, lead whites were made using a method that traces back before the time of Christ. The Dutch found ways to scale the making of this paint without changing the underlying process.

Using this historic technique, every particle of Stack Lead White is randomly different. So every conglomeration of pigment particles on a nano scale behaves differently. This is precisely the beauty of Stack Lead White. With industrially-made pigments, every particle is identical. So conventional paints cannot be used to create the brushstrokes of the whites from centuries ago.

How does Michael Harding make Stack Lead White? First he takes strips of lead and hand rolls them into spirals and places them in small clay pots where they stay suspended above a small amount of vinegar. The pots then are buried beneath mounds of steaming, biologically active horse dung. The chemistry is simple: vapors of acetic acid from the vinegar first corrode the lead, then carbonic acid from the warm horse dung converts the white corrosion into lead carbonate that forms into the most beautiful white flakes resembling the delicate paper of a wasp's nest. The entire process takes roughly three months depending on season and nature's variable influence. Once corrosion has taken place the flakes of white are scraped off and ground beneath water. The remaining paste is washed of impurities then laid out in large trays to dry. Once completely dry it is ground again into linseed oil creating the finished product. The result is a hand made pigment and oil paint that assumes the colour of a warm, creamy white like those found in Rembrandt's paintings.

The handling quality of Stack Lead White is completely different from industrially made lead white. It possesses a quality known as "thixotropic" or what seasoned painters refer to as 'ropy,' which means the texture becomes more fluid as it is agitated with a brush or palette knife. Before the paint has been manipulated it is very dense; it can even support a palette knife upright. After the paint has been agitated its consistency changes to short wisps of paint. Continuing to manipulate the paint, it starts to become "ropier" and produces long stringy wisps of paint. The addition of texture multiplies the possibilities for complexity and subtlety in the whites of a painting.

According to well known artist David Leffel, "this white allows an artist—any artist—long limpid descriptive brushwork, brushstrokes that reveal the workings and understandings of the mind behind the hand. The long supple quality of stack white that allowed old masters the freedom and expressiveness that enralls us to this day is, at last, at hand."

### HEALTH & SAFETY

All Michael Harding oil paints have been tested and conform to the ASTM-D 4236 standards. The following industry standard "best practices" should be observed when using any and all fine art oil paint products and media.

### SAFETY RECOMMENDATIONS:

#### Handling Paints and Mediums

- Don't smoke and paint. Paint on hands and fingers can make its way to the cigarette and thus be inhaled. This is extremely dangerous even with paints that are labeled non toxic.
- Don't eat and paint. Again, paint can make its way from hands and fingers onto foods you eat with your hands. Wash your hands thoroughly to ensure there is no residue on your hands and fingers before eating. Don't open food containers or bottles when your hands have paint on them.
- As a general precaution, do not allow paint to come in contact with your skin in such a volume that might cause skin sensitivity.
- Some paints contain metals such as lead. Keep these products out of the reach of children.

#### Studio ventilation

Studio ventilation is of utmost importance when using our mediums because some of them contain turpentine which can cause unpleasant headaches.

- Ensure you have proper ventilation. No matter the size of your studio, you will need to ventilate your painting area. In smaller studios having windows open and an exhaust fan may fulfill ventilation safety practices. In any case, you want to make sure you are blowing air out of an enclosed studio space, and have a source of fresh air at all times.
- Don't sleep in a room where paint, mediums or varnishes are stored or being used.

#### Rags, paper and cloth with paint and/or solvents on them are combustible

- Never leave rags, paper towels or material with paints on them in an indoor bin.
- Remove waste from indoor bins to a proper outdoor metal waste receptacle: it should have a metal lid and be away from direct sunlight and/or high temperatures and be full of water.
- If you must work in a studio where art material waste piles up throughout the day, be sure to "dampen down" the waste receptacle allowing no chance for any waste to ignite. This is accomplished by saturating waste bin contents with water.

While linseed and other drying oils are not considered toxic, these oils may self-combust when on rags and placed in piles. Always dispose of rags by first soaking them in water then removing them from an indoor location to a secured outdoor location where they can be picked up by a professional service to be cleaned or taken to a disposal site. This is recommended with all brands of oil paints and solvents not just Michael Harding's.

Read and understand MSDS, Material Safety Data Sheets and SDS, Safety Data Sheets. Every manufacturer of paints, mediums and varnishes is required to provide MSDS and/or SDS to retail outlets when shipping products. Most often you will find the MSDS or SDS with the retailer or by querying the manufacturer for them on the specific product acquired. Michael Harding Artist Oil Colours will provide them upon request, and you can download them from the website.

Cadmium colours are not officially subject to the same regulations covering lead-based products, however this does not mean they are non-toxic. Treat all paint sensibly to avoid problems.

**Michael Harding Art Materials Ltd.**

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