



ColourFal Zerø® colourants represent our line of universal VOC-free colourants. A line of colourants not just for those who need an optimal system but for those who care for high performance, quality colourants.

Designed to deliver optimal performance with unsurpassed compatibility, ColourFal Zerø® provides one of the cleanest and richest colour palettes available in the market.



### PARTNER WITH LORAMA GROUP AND ENJOY THE COLOURFAL ZERØ® ADVANTAGE

By partnering with Lorama Group, enjoy access to a host of technical services provided by our team of full-time chemists. Our experts will aid and assist you in the areas of:



#### INNOVATION

At Lorama Group we understand innovation is key to success. Our team is available to create custom solutions to meet ever-changing market needs, from formulation to customization.



#### **PARTNERSHIP**

By joining hands with Lorama Group, our team will help you with both technical and logistical support. Our experts will be with you from formulation to after-sales support, every step of the way.



#### **SUSTAINABILITY**

ColourFal Zerø® contains raw materials from renewable resources. Using bio-based chemistry is part of our DNA, helping support the environment for generations to come.



### TRAINING & DEVELOPMENT

Lorama University helps impart both sales and technical knowledge to our partners – helping with colour theory, paint manufacturing and colour marketing.

What's more you will enjoy a host of technical, marketing and logistics services all aimed to help grow and sustain your business.





Lorama Group's entry into the colourant business was not planned—we were pulled into the business when we realized that customers' colourant needs could not be addressed with existing colourant technology.

## How it happened.

Since 1977, Lorama has focused on expertise in polysaccharide technology enhancements and adapting it to coatings and commercial applications. technical service lab was dedicated to implementation and paint formulation optimization globally.

While generating enhanced performance, costs savings and reduced VOC in paint formulations; Lorama was constantly requested to resolve wetting/dispersion, compatibility and incorporation issues with colourants.

Over the course of time, a deep understanding was acquired to optimize colourants in paint bases, fix common issues and provide targeted solutions.

VOC-free colourants brought with it a multitude of technical issues which traditional additives & approaches could no longer address

### Lorama takes a different approach.

Typical approaches to solve VOC-free colourant issues focused on modifying colourant properties. However, paint formulations differ vastly from each other by market. Application of any change to the colourant was often done at the expense of the paint properties. Paint formulation became secondary, only a limited set of bases were considered and machines were changed to improve dispensing characteristics.

With an understanding of overall paint technology and colourants, Lorama embarked on a wholistic solution keeping in view the desired application experience. A new colourant system was required to address performance and dispensing characteristics in a single sweep.

**LORAMA PAINT MODIFICATION KNOW-HOW** 

Applying our knowledge of **Paint and** Additive Technology to **VOC-free** colourants

- Wetting/Dispersion
- Rheology Modifier
- Protective Colloid
- Polysaccharide Binder Technology
- Humectant/Open Time Extenders

LORAMA **COLOURANT EXPERIENCE** 

Applying our experience in solving colourant issues • Surfactant Leaching

**VOC-free Colourant Issues** 

- Settling & Clogging in Dispenser
- Flood/Float Compatibility Issues
- Post Tint Viscosity Drop
- Drying at the Tip

Lorama's R&D creates a system of wetting & dispersion to grind pigments to provide outstanding compatibility & humectancy for machine tinting.

This bold step optimizes both paint film properties and tinting machine operation.

2010 Lorama introduces PATENTED



technology through its own VOC-free colourant line



Utilizing our deep understanding and insight of paint and its applications, Lorama Group had the perspective to THINK. With a vision that optimized both paint properties and tint application, steadily the DREAM of a wholistic colourant solution was realized. Our entrepreneurial tenacity led us to CREATE and patent a sustainable solution through SmartTint® technology.

THINK.DREAM.CREATE.



As a patented technology, SmartTint<sup>®</sup> is a revolution in point of sale colour technology. Developed by Lorama Group, this unique chemistry is designed to provide exceptional results in machine dispensed colourant lines. SmartTint<sup>®</sup> has been a global success across continents and climate systems. Our customer feedback further reinforces that no other chemistry in the market has replicated the below advantages as effectively and efficiently as SmartTint<sup>®</sup>.

## How SmartTint® supports ColourFal Zerø®

SmartTint® properties derived from LPR technology

ColourFal Zerø<sup>®</sup> with patented SmartTint<sup>®</sup> technology

Manufacturer benefits

Resin Based Humectant/Open Time Extender

Polymeric Surfactant/Film Forming Binder Technology

Grinding Resin/Dispersion Agent

> Rheology Modifier

Protective Colloid Elimination of dry tip without the use of PEGs

Minimized surfactant leaching

Enhanced colour acceptance and colour vibrancy

Minimized viscosity drop and incompatibility

Minimized colourant settling during transport and in the POS machine

Minimized freeze thaw concerns

Superior colour reproduction and paint performance

Minimized dispensing machine maintenance, downtime & replacement costs

# Advantages of ColourFal Zerø®

Applicable to 400, 500, 700 and 900 Series

- Environmentally Friendly ColourFal Zerø® is created with raw materials from renewable resources
- Machine Compatibility Compatible with any Automatic or Manual Tint Machine
- Lower Downtimes SmartTint® technology reduces machine maintenance
- Unparalleled Range ColourFal Zerø® can be used with both water and solvent based paints
- Health and Safety VOC-Free, Alkylphenol Ethoxylate (APE) free and free of formaldehyde and formaldehyde donors
- Minimized viscosity drop post tinting
- Industry leading tip dry out resistance technology
- No pigment settling in container & dispensing unit
- No flocculation, rub up or picture framing
- Consistent colour reproduction
- Excellent compatibility with a wide range of binders

ColourFal Zerø® colourants can be used to create a fully customized system. Our team will work to create a system tailored to your needs.

Packaging is important. ColourFal<sup>®</sup> and ColourFal Zerø<sup>®</sup> tamper evident lids give you peace of mind to know that factory quality is maintained. The translucent natural colour of the plastic allows for quick viewing of the colourant inside.



CANISTER	PRODUCT	PRODUCT	SPECIFIC	SPECIFIC % PIGMENT SOLIDS		% By WT.	Light	Weather	Chemical
CODE	CODE	DESCRIPTION	GRAVITY	Wt.	Vol.	Total Solids	Fastness (Full Shade/Tint)	Fastness (Full Shade/Tint)	Resistance
AXX	400-010	Organic Yellow	1.40	50.2	35.4	65.5	7-8/6-7	4/3-4	4
В	400-020	Lamp Black	1.42	43.3	24.2	62.6	8/8	5/5	5
С	400-030	Yellow Oxide	1.93	59.8	28.4	77.0	8/8	5/5	5
D	400-040	Phthalo Green	1.44	44.8	26.4	64.9	8/8	5/5	5
E	400-050	Phthalo Blue	1.41	41.4	22.8	59.2	8/8	5/5	5
F	400-060	Red Oxide	2.07	60.4	26.1	80.4	8/8	5/5	5
1	400-070	Brown Oxide	1.84	60.0	30.0	79.2	8/8	5/5	5
KX	400-080	Titanium White	2.08	66.3	37.3	81.9	8/8	5/5	5
L	400-090	Raw Umber	1.50	45.1	22.3	63.9	8/8	5/5	5
R	400-100	Organic Red	1.41	44.3	27.3	60.2	7/7	4/4	4-5
Т	400-110	Medium Yellow	1.35	46.7	35.8	64.5	8/7	4-5/5	4
٧	400-120	Magenta	1.30	37.2	21.5	56.2	8/7	4/4	4-5
AN	400-130	High Performance Yellow	1.61	53.1	27.4	67.7	8/8	5/5	5
RN	400-140	High Performance Red	1.32	37.9	23.7	53.1	8/8	4-5/4-5	5
AXT	400-160	HH Yellow	1.48	50.0	33.1	65.1	7-8/7	4-5/4-5	4-5
RX	400-170	Exterior Red	1.31	37.5	24.1	52.4	8/8	5/5	5

CANISTER	PRODUCT	PRODUCT	SPECIFIC	% PIGMENT SOLIDS		% By WT.	_ Light	Weather	Chemical
CODE	CODE	DESCRIPTION	GRAVITY	Wt.	Vol.	Total Solids	Fastness (Full Shade/Tint)	Fastness (Full Shade/Tint)	Resistance
AXN	500-010	Organic Yellow	1.36	42.5	28.2	59.5	7-8/6-7	4/3-4	4
В	500-020	Lamp Black	1.23	26.7	27.9	47.7	8/8	5/5	5
С	500-030	Yellow Oxide	1.81	57.4	26.4	75.2	8/8	5/5	5
D	550-045	Phthalo Green	1.43	44.2	25.1	63.9	8/8	5/5	5
E	550-055	Phthalo Blue	1.33	38.3	21.0	55.8	8/8	5/5	5
F	500-060	Red Oxide	2.01	57.3	22.3	77.5	8/8	5/5	5
1	500-070	Brown Oxide	1.63	49.7	22.5	68.2	8/8	5/5	5
KX	500-080	Titanium White	2.04	67.0	37.6	82.4	8/8	5/5	5
L	500-090	Raw Umber	1.48	43.5	21.0	62.3	8/8	5/5	5
S	500-100	Organic Red	1.29	32.4	17.2	49.8	7/7	4/4	4-5
Т	500-110	Medium Yellow	1.31	44.2	25.1	61.4	8/7	4-5/5	4
М	500-120	Magenta	1.29	38.3	21.0	52.4	8/7	4/4	4-5

CANISTER	PRODUCT	PRODUCT DESCRIPTION	SPECIFIC GRAVITY	% PIGMENT SOLIDS		% By WT.	_ Light	Weather Fastness	Chemical
CODE	CODE			Wt.	Vol.	Total Solids	Fastness (Full Shade/Tint)	(Full Shade/Tint)	Resistance
QS	700-010	Yellow HS	1.25	37.5	25.9	61. <i>7</i>	7-8/6-7	4/3-4	4
XS	700 - 020	Black	1.32	34.7	18.8	59.4	8/8	5/5	5
TS	700 - 030	Yellow Oxide	1.89	56.2	25.7	75.8	8/8	5/5	5
PS	700 - 040	Green	1.28	30.1	16.4	56.5	8/8	5/5	5
LS	700 - 050	Blue	1.26	26.7	13.6	53.1	8/8	5/5	5
YS	700 - 060	Red Oxide	2.01	60.0	25.3	78.9	8/8	5/5	5
JS	700- 070	Black HS	1.25	35.5	23.4	59.0	8/8	5/5	5
KU	700 - 080	White	2.04	65.0	36.4	80.6	8/8	5/5	5
WS	700 - 090	Umber	1.64	51.1	25.1	69.3	8/8	5/5	5
NS	700 - 100	Red	1.23	22.9	12.1	54.3	8/7	4/3-4	4-5
US	700 - 110	Orange	1.28	33.2	19.6	56.9	8/8	4-5/4-5	5
BS	700 - 120	Magenta	1.13	25.5	19.4	45.5	8/7	4/4	4-5
MS	700 - 130	Yellow	1.39	44.4	27.6	59.6	8/7	4/4	4-5
VS	700 - 140	Red HS	1.26	33.5	21.7	59.6	8/7	4-5/3	4
ZS	700 - 150	Violet	1.32	35.6	19.8	60.3	7-8/7-8	4-5/4	5
RS	700 - 160	Blue HS	1.27	41.8	31.7	63.3	8/8	5/5	5

CANISTER	PRODUCT	PRODUCT DESCRIPTION	SPECIFIC GRAVITY	% PIGMENT SOLIDS		% By WT.	Light	Weather Fastness	Chemical
CODE	CODE			Wt.	Vol.	Total Solids	Fastness (Full Shade/Tint)	(Full Shade/Tint)	Resistance
BIO	900-020	Black Oxide	1.85	55.0	21.6	71.1	8/8	5/5	5
DXE	900-040	High Strength Green	1.31	37.1	25.6	58.4	8/8	5/5	5
СВЕ	900-050	Cobalt Blue	2.09	62.0	28.7	72.8	8/8	5/5	5
REE	900-140	High Strength Red	1.29	43.0	31.6	58.1	8/8	5/4-5	5
ORE	900-150	High Strength Orange	1.29	46.7	33.6	66.3	8/8	5/5	5
BVE	900-160	High Strength Yellow	1.93	57.7	23.6	74.8	8/8	5/5	5
UE	900-180	Ultramarine Blue	1.81	55.2	23.8	78	8/8	4-5/4-5	5
DXO	900-190	Green Oxide	1.97	65.0	27.8	83.7	8/8	5/5	5
ОХ	900-200	Orange Oxide	1.77	55.1	25.6	78	8/8	5/5	5

Pages 5 to 6 demonstrate typical colourant values and are not product specifications.

The data for light fastness, weather fastness, and chemical resistance is derived from pigment manufacturers. Light Fastness: (8=excellent, 1=poor) Tint = (1:4.6 TiO $_2$ ), Weather Fastness: (5=excellent, 1=poor); 12 months/Long Oil Alkyd, Chemical Resistance: (5=excellent, 1=poor).

<sup>\*</sup> US EPA Method 24

# Overcoming Global Challenges





# Support & Services

Lorama Group has built its business on providing the highest level of customer service that is quickly disappearing from our industry today. We understand that with limited resources and time it is a challenge for our customers to implement new technologies and specialty additives into a vast array of formulations. Our laboratory services are designed to give manufacturers the competitive edge they need in today's marketplace.

### LORAMA GENERAL LAB SERVICES

- Paint Formulation Support
- On-site Technical Support
- On-site Scale Up
- Paint Training Programs
- · Ongoing Research and Development

### COLOURFAL® LAB SERVICES

- Colour matching and formula book generation
- Database construction and maintenance
- · Incorporation of new fandecks and colour cards
- Tint base cost efficiency and performance analysis
- Raw Material rationalization
- Colour space analysis and customization of colourant set



# Tint Base Services

Planning on manufacturing paint bases? Want to add an additional product line?

Let's get you up and running quickly.

## Introducing COLOURFAL® RAPIDTINT

ColourFal® RapidTint is an effective paint system that allows you to hit the ground running and begin your point of sale operations in the least possible time. Being a fully customizable solution, the system allows for modifications within your colourant set, number of bases and even your fandeck.

ColourFal® RapidTint formulas can be based on a four, three or two base system. What's more, the formulas are designed keeping *local raw material availability in mind*. You will not experience sourcing or logistics issues. You can localize the formulation further by using your local key raw materials e.g. Titanium Dioxide or Calcium Carbonate.

Starting point formulas for these bases are available upon request. We offer two qualities of paint bases:

- 1. Essential line (Matte and Satin)
- 2. Premium line (Matte and Satin)

Our team of experts will be available to guide you every step of the way, from initial formulation to final production.

# How it works:

- 1. We provide paint formulations and samples that can be used as reference or standard.
- 2. Formulations are produced in your manufacturing facility.
- 3. We prepare your very own customized Formula Book.
- 4. We ensure that you are prepared for a successful launch.
- 5. We offer colour marketing material and training as an advantage to help boost your sales.

In this system, we take care of groundwork while you enjoy a quick manufacturing set-up and faster paint to market scenario.

# Colour Insights

Our mission is to provide Colour Insights for an international audience along with curated exclusive galleries of interior and exterior spaces, where ColourChic colours are the star. We provide Colour Insights Members with the tools for inspiration, promotional material or social media posts.



## **Trend Forecasting**

 Industry insights with monthly blog posts of colours trending globally.



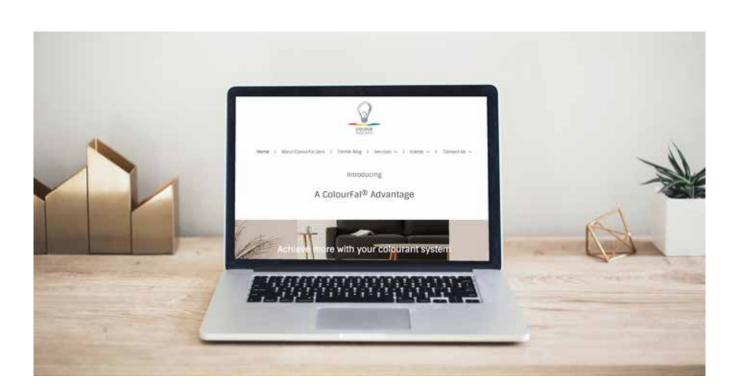
## **Online Gallery Support**

 Featuring custom tailored architectural photos within a secure and exclusive gallery.



### **Colour Education**

 Lorama University seminars are provided by a colour expert to foster and encourage colour confidence within your team.



# Colour Tools

### **COLOURCHIC Fandeck**

Part #49101010

Designer inspired collection featuring 1232 colours ranging from neutrals to the hottest, vibrant trends in the market. Six colours per page are arranged from vibrant to pastel. Each page is chromatically organized for easy colour look up. There is a special section for 32 off-whites. Standard quantities are 20 fandecks per box.





## **Replenishing Stripe Cards**

Part # 49101015

Each of these stripe cards serves to replenish the Standard 4' Display. There are 208 stripe cards that are available. Stripe Cards can be ordered in two ways: 1) As a single stripe card: order by bagstock, specified by card number.\* Each bagstock consists of 10 copies of that single stripe card. Part# 49101015.
2) As a Starter Set: 10 copies of all 208 stripe cards. Part# 49101005 Individual card dimensions: 8.5" height x 1.80" wide, (4.57 cm height x 21.59 cm wide)

## **Replenishing Solid Cards**

Part # 49101007

Each of these solid cards serves to replenish the 2' Trend Display. Featuring 1 colour per card. Ordered by bagstock, specific by card number.\* Each bagstock consists of 10 copies of that single solid card.







### ColourSensations Fandeck

Part # 49101022

A unique collection featuring 2232 colours. This fandeck features a well-balanced colour palette showcasing an extensive range of both neutral and accent colours. Specially selected by experienced designers. Eight colours per page are arranged from vibrant to pastel. For easy colour look up this fandeck features colour dividers. Standard quantities are 10 fandecks per box.

# COLOURCHÍC Offerings

## Standard 4' Display

The illuminated 208 colour stripe cards display (1232 colours) features a back-lit header with customizable graphics area. The base includes additional storage space. Permanent colour stripe cards are installed and a Starter Set of colour stripe cards is included.

Display Dimensions: 4' width  $\times$  6'8'' height  $\times$  2' depth (121.9 cm width  $\times$  208.3 cm height  $\times$  61.0 cm depth)

## Colour Wizard 2' Display

Matching Display unit to house digital devices, such as computer screens or tablets, with an illuminated header and customizable graphics. Digital Device not included.

Display Dimensions: 2' width x 6'8" height x 2' depth (61 cm width x 208.3 cm height x 61.0 cm depth)

## 2' Trend Display

Great for those looking to highlight certain popular colour trends and convenient for those with limited space. Featuring 150 solid colour chip displays.

Display Dimensions: 2' width x 6'8" height x 2' depth (61 cm width x 208.3 cm height x 61.0 cm depth)

## 2' Colour of The Year Display

For colour marketing forward campaigns featuring the colour of the year plus a selection of palettes. Slots for up to 13 solid chips with an illuminated header and customizable graphics.

Display Dimensions: 2' width x 6'8" height x 2' depth (61 cm width x 208.3 cm height x 61.0 cm depth)



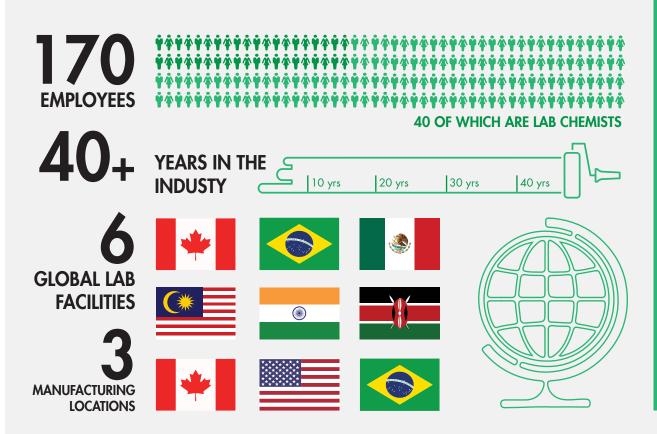


# Welcome To The Lorama Difference



Founded in 1977 and headquartered in Mississauga, Ontario, Lorama Group Inc. is both a manufacturer of Colour Dispersions & Bio-based Additives, as well as an international distributor of Specialty Chemicals and Functional Extenders. Through our entrepreneurial spirit and with deep expertise in global regulatory and raw material requirements, Lorama has grown to service a multitude of markets across over 90 countries.

Having in-depth technical expertise and the ability to fully deconstruct and rebuild formulations, Lorama Group is recognized worldwide for our knowledge and eagerness to help with paint formulation. In addition to having 6 global labs, our main laboratory powerhouse is situated in Mississauga, housing our R&D, technical services and colour services group. Customers rely upon our 40 full-time chemists for commercially proven solutions through our wholistic consultative technical sales and service approach. For over 40 years we have supplied commercially cost-effective sustainable solutions, helping our customers thrive in highly competitive markets.



# Other Products

Colourants are just the beginning. At Lorama Group, we manufacture as well as offer branded technologies to meet all of your paint manufacturing needs.

## **TECHNOLOGIES**

PRODUCT	CATEGORY				
LPRT	Polysaccharide Resins				
pHLora Z⁵ RT	pH Modifiers				
FALAMINE <sup>®</sup>	pH Modifiers				
Falgel	Rheology Control				
RheoFal	Rheology Control				
<b>LAF</b> ®	Foam Control				
Falden	Foam Control				
<b>LDA</b> ®	Dispersants				



