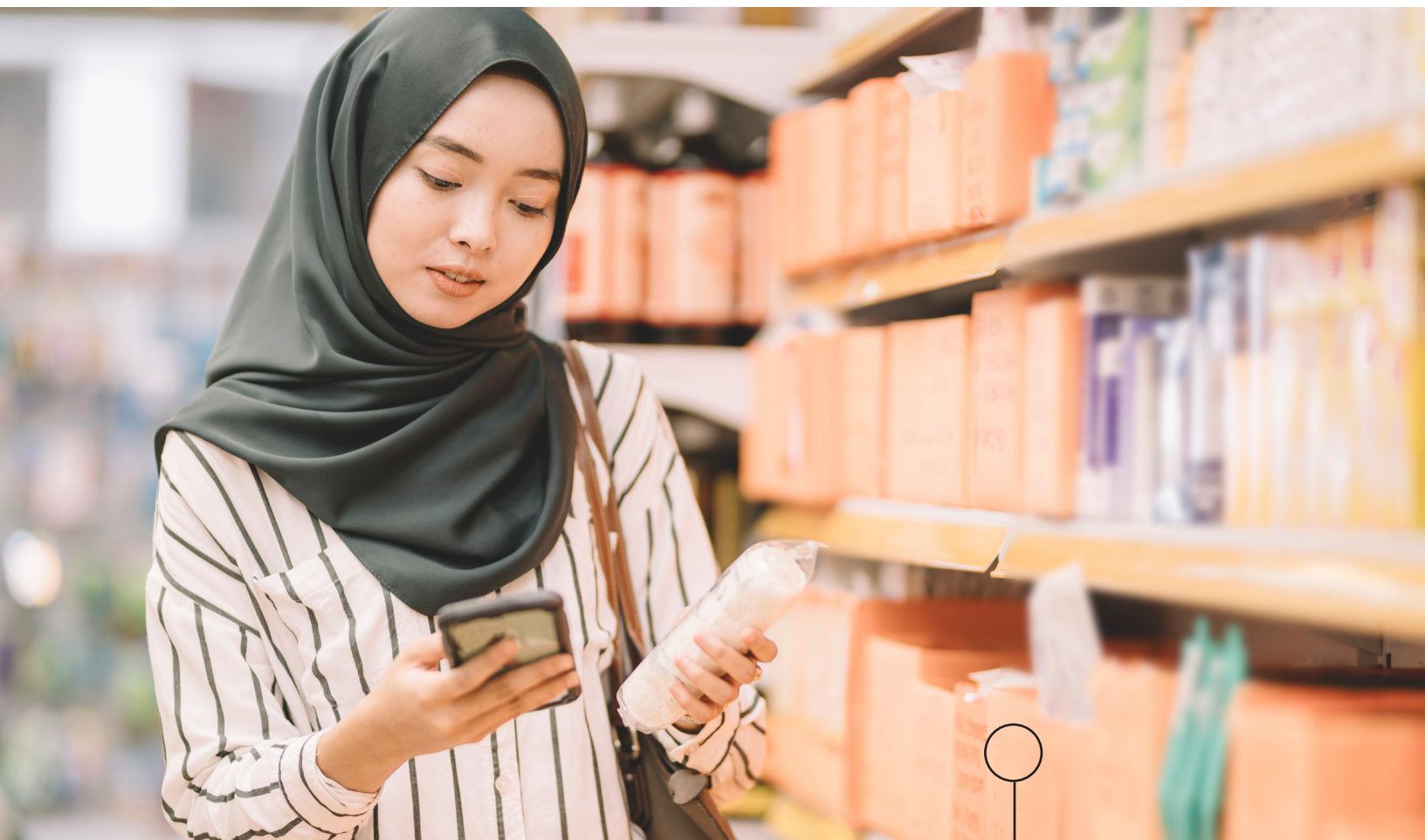




 Pantone 1555 C

Ensuring Brand Color Accuracy for Life Science and Regulated Products

Color Management Solutions for Life Sciences

Accurate Color is Critical

Defining color and consistently ensuring its accuracy is not only fundamental to product success, but critical for regulated Life Science brands. X-Rite is a global leader in quantitative color measurement and visual analysis. We pioneer innovative solutions that are scalable from a single location to a global, multi-facility enterprise. The results are more accurate color, improvements in productivity, reduced time-to-market, and increased profitability.

X-Rite's product portfolio offers solutions that communicate color accurately throughout the entire process. Ultimately, accurate color measurement produces numerous immediate and long-term benefits — cost savings through reduced product waste, minimal production downtime, elimination of off-color product shipments and rework, seamless management of the color process through a global supply chain or multiple locations, the prevention of bid list exclusions because of poor quality ratings, and maintaining the electronic records required by regulations.

The Color of Success

Consumers identify OTC and pharmaceutical drugs and medical devices by their color. For the Life Sciences industry, this makes accurate product and packaging color more than an aesthetic concern. It's a matter of safety.

X-Rite offers the expertise and technologies that Life Science brands, manufacturers, and printers need to ensure accurate and consistent color between products and packaging and track regulatory compliance.

Whether you work with creams, liquids, powders, capsules, plastic devices or corresponding packaging, we offer the tools you need to:

- Eliminate common visual errors caused by inadequate lighting or random visual inspection.
- Integrate consistent, precise color quality control into your operation.
- Reduce waste and rework caused by mismatched colors.
- Achieve color harmony among locations and suppliers.
- Reduce production times.
- Improve quality analysis and overall control.
- Track and electronically report compliance.



Unique Solutions for Life Science Color Control

Life Sciences brands require precise color.

The Life Sciences industry continues to evolve at an accelerated pace, exerting pressure on brands to remain compliant while developing innovative products and packaging. X-Rite's innovative solutions ensure accurate color for consumer safety and brand loyalty.

Instrumentation



Handheld Sphere Spectrophotometer

Measures color with and without the impact of surface effects like shimmer, sparkle, and reflectance.



Handheld 45:0 Spectrophotometer

Captures density metrics as well as colorimetric and spectral values on regular and matte surfaces.



Benchtop Sphere Spectrophotometer

Measures reflection and transmission on opaque, transparent and translucent samples.



Benchtop Non-Contact 45:0 Spectrophotometer

Measures color on scattering surfaces like paper and solid objects without angular effects.



Multi-Angle Spectrophotometer

Measures effect finishes to deliver complete characterization of color, sparkle, and coarseness.

Software



Formulation Software

Yields better matches in fewer steps and with fewer corrections using the industry's smartest formulation engine.



Quality Control Software

Ensures consistent color throughout the supply chain through adaptable and configurable software options.



Quality Assurance Software

Communicates and manages precise color and print specifications throughout the packaging and print supply chain.



Digital Standards

Specifies and communicates color standards digitally to all global supply chain stakeholders.



Instrument Performance Software

Verifies and optimizes the performance of color measurement devices to reduce variance among instruments.

Visual Assessment



Light Booth

Replicates almost any lighting environment to visually verify color accuracy and integrity.



Visual Assessment Tools

Evaluates an individual's ability to discern color through easy-to-administer tests.

End-to-end solutions to manufacture accurate color and track regulatory compliance for Life Science products and packaging.

Application												
Plastics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gels	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
Capsules	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
Liquids	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
Powders	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
Packaging	✓	✓				✓	✓	✓	✓	✓	✓	✓



Plastics

Formulate and produce in-tolerance brand color for plastic medical devices and packaging materials.

Gels, Capsules, Liquids and Powders

Formulate, manufacture, and control consistent color for brand identification and consumer safety.



Packaging

Achieve consistent color across multiple packaging types, including transparent, translucent, and metallic substrates.

Gels, Capsules, Liquids and Powders

Ensure consumer safety with accurate brand color

Accurate color is necessary for consumer safety and to minimize the risk of counterfeiting, but producing consistent color across different Life Science product types and materials is challenging. Digital color solutions enable manufacturers to effectively communicate with brands and efficiently formulate, manufacture, and control the color of Life Science products.



L*: 76.70 a*: 31.46 b*: 51.26

Formulation

- Deliver accurate formulation of colorants to meet customer-provided standards.
- Achieve the tightest tolerances.
- Process color data to provide optimal initial color matches.



Quality Control

- Evaluate and control metallic samples.
- Achieve precise color measurements despite interference pigments.
- Consistently measure against a standard and ensure a color quality audit trail.
- Electronically track regulatory compliance.



Visual QC

- Eliminate subjectivity in pass/fail decision making.
- Standardize lighting and viewing conditions.
- Improve overall product quality.



Medical Device Plastics

Formulate and produce color-accurate brand color for plastic medical devices

As the global market for high-quality medical devices continues to expand, Life Science manufacturers are charged with achieving accurate color on safe and effective products. However, medical grade polymers can vary, making color control a challenge. X-Rite's end-to-end solutions help manufacturers produce color-accurate plastic products and electronically track compliance for brand integrity regardless of opacity, translucency, texture, special effect additives, and more.

L*: 39.50 a*: 0.21 b*: -46.32

Formulation

- Achieve the tightest tolerances.
- Process color data to provide optimal initial color matches.
- Deliver accurate formulation of colorants to meet customer-provided standards.



Quality Control

- Consistently measure against a standard and ensure a color quality audit trail.
- Deliver accurate color on opaque, translucent, and textured plastics.
- Achieve precise color measurements.



Visual QC

- Reduce human error and waste due to rejects and rework.
- Shorten time to market.
- Improve overall product quality.





Packaging

Brand color matching from design to print to shelf

Studies show consumers rely on the color of medication for identification and brand trust. To ensure safety, authenticity, and compliance across all applications – including liquids, gels, powders, plastic films, capsules, and packaging – brands must oversee and manage color across global manufacturing and packaging operations and generate a compliance audit trail for electronic recordkeeping. An end-to-end digital color solution from X-Rite allows brands to set precise color standards for Life Science products and packaging and communicate tolerances and color expectations to global manufacturers and printers.

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Formulation

- Provide optimum initial color matches for the intended viewing condition.
- Consider substrate color to formulate accurate inks.
- Use existing assortments of recipes to save time and minimize waste.



Quality Control

- Allow stakeholders to work to the same achievable standards.
- Comprehensive production reporting to identify, evaluate, and correct areas of opportunity.
- Seamlessly communicate QC results for closed-loop production.



Reporting

- Receive one number that reflects the level of compliance with a specification.
- Maintain color and print quality across various shifts and sites.
- Maximize current investments across all areas of production.



Why Partner With Us?

Minimize Risk & Protect Your Investment

To achieve the highest color accuracy, you must maintain your color investments. X-Rite offers Service Care Packages to ensure your device continues to operate in peak condition once it leaves our factory, so you can deliver the color your customers specify.

Service Care Plan Options

	Premium	Certification Plus	NetProfiler Plus	Protective	Basic Warranty
Product Defects (Labor & Parts)	✓	✓	✓	✓	✓
Break-fix Coverage (Labor & Parts)	✓	✓	✓	✓	
NetProfiler License and Tiles	✓		✓		
Annual Preventative Maintenance (Inspect & Clean)	✓	✓			
Email & Phone Support	✓				
Expedited Shipping	✓				

Invest in your most important asset – your people.

Our color training and services are customized to fit your needs, schedule, and budget. From introductory classes to advanced applications, our extensive library of courses spans every learning style to help you improve your color knowledge and ensure your workflow is the best it can be.

Training and Services Options

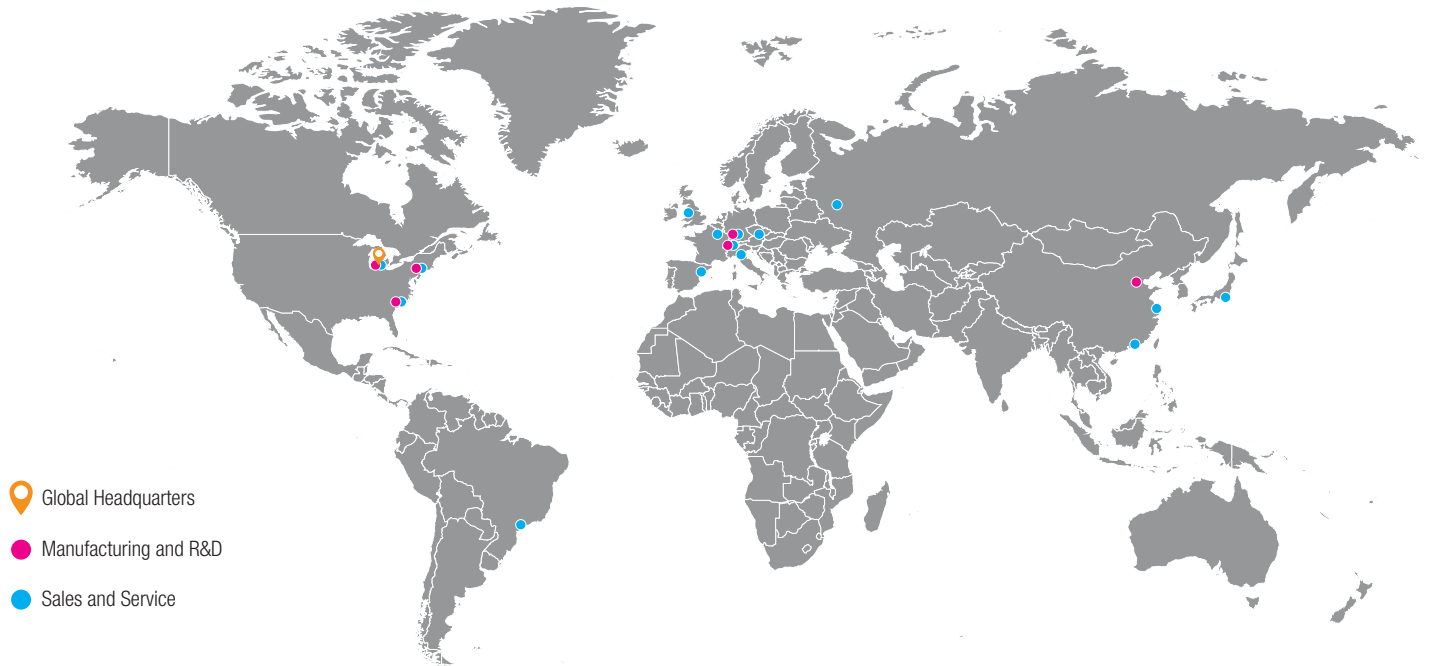
- Classroom
- Custom Consultation
- Onsite
- Color Workflow Audit
- Online
- Seminar

“Color represents many brands, and consumers rely on it for recognition. In Life Sciences, color criticality is not an option. Color must be accurate and tracked. That’s why we have included “electronic record keeping” in ColorCert, to support customers operating in a CFR21-Part 11 or other regulated environment where auditing and access control is required.”

— Christine G.
BRAND GLOBAL STRATEGIC ACCOUNT MANAGER

We're color experts.

We recognize that great color portrays great quality and know that your success hinges on the consistent and accurate production of this color. With so many places for color to go wrong, it can be hard to know how to get it right. That's where we can help. By blending the art and science of color, we help you achieve the highest level of color integrity so your product – and your customer's product – comes out ahead.



End-To-End Solutions

We provide solutions that span the entire workflow, from design through production, to ensure your color is optimized.

Innovation

Bridging the gap between color and appearance, we are blazing the trail for you to take your color operations to the next level.

Experience

With 60+ years of experience in color manufacturing, our expertise spans a range of industries.

Passion

Inspired by the great color our customers produce, our X-Rite color team provides quality support and training services.

Call **888-800-9580**
or visit **www.xrite.com**

X-Rite Incorporated
4300 44th St. SE, Grand Rapids, MI 49512 United States

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