



SMART COLORANTS

MAKING THE MOST OF COLOR

SMART COLORANTS:
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HELLO



Alan Barcon
Associate Director, Marketing
and Technology, ColorMatrix



Diana Quickel
Project Manager, ColorMatrix



SMART COLORANTS:
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AGENDA

COMPELLING CASE FOR COLOR

GROWING MARKET FOR COLORANTS

BROAD SPECTRUM OF APPLICATIONS

POLYMER COLORANTS VS. PRE-COLORED RESINS

POPULAR POLYMER COLORANTS

BEST PRACTICES + USE CASES

A row of colorful kayaks (yellow, orange, red, teal, green, blue) is lined up on a sandy beach. The kayaks are viewed from a low angle, showing their curved hulls and black mounting brackets. The background is a bright, sandy beach with some footprints.

SMART COLORANTS:
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COMPELLING CASE FOR COLOR

**ENHANCING POLYMER MATERIALS WITH
COLORANTS CAN:**

- SET YOUR PRODUCT APART
- REINFORCE BRANDING
- ADD VALUE TO A COMMODITY ITEM
- EVOKE EMOTIONS
- PROMOTE SAFETY



SMART COLORANTS:
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GROWING MARKET FOR COLORANTS

84.7%

OF CONSUMERS:

CITE COLOR AS THE
PRIMARY REASON
THEY BUY A
PARTICULAR
PRODUCT*

\$37.5B

REVENUE IN USD

PROJECTED GLOBAL
COLORANTS MARKET
SIZE BY 2025**

SOURCE:

*WebpageFX, www.webpagefx.com/blog/web-design/psychology-of-color-infographic/

**"Colorant Market Size Worth \$37.49 Billion By 2025," Grand View Research, Inc.

SMART COLORANTS:
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**BROAD SPECTRUM
OF APPLICATIONS**



AUTOMOTIVE



CONSUMER



PACKAGING



APPLIANCE



OUTDOOR



**BUILDING +
CONSTRUCTION**

SMART COLORANTS:
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POLYMER COLORANTS VS. PRE-COLORED RESINS

PRE-COLORED RESINS

- + CONSISTENT INCORPORATION IN THIN-WALL PARTS
- + SAVE SET-UP TIME ON SMALL PRODUCTION RUNS
- HARDER TO OBTAIN EXACT COLOR NEEDED
- LIMITED DESIGN FREEDOM

POLYMER COLORANTS

- + MAY BE MORE COST-EFFECTIVE
- + PRECISE COLOR MATCHING
- + TYPICALLY REDUCE SET-UP TIME + COSTS ON LONG, HIGH VOLUME PRODUCTION RUNS

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POPULAR POLYMER COLORANTS

**SOLID
COLORANTS**



**LIQUID
COLORANTS**



SMART COLORANTS:
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COMPLEMENTARY SOLUTIONS

SOLID COLORANTS

AVAILABLE BASED ON MANY
DIFFERENT CARRIER RESINS

CLEAN, EASY HANDLING + FEEDING

DESIGNED + ENGINEERED FOR
COMPATIBLE POLYMER MATRIX

LIQUID COLORANTS

MORE EFFECTIVE FOR LOW
LETDOWN RATIOS

HIGHLY ACCURATE DISPENSING

CAN BE PROCESSED AT
LOWER TEMPERATURES



SMART COLORANTS:
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EXPANDING COLORANT OPTIONS

- WIDEN SCOPE OF POLYMER MATERIALS + APPLICATIONS
- ENSURE HIGHEST QUALITY + CONSISTENCY FOR EACH USE CASE
- ACHIEVE DESIRED EFFECT FOR EACH PART
- OPTIMIZE PRODUCTIVITY + SYSTEM COSTS BY MATCHING THE RIGHT COLORANT TYPE TO THE PROJECT



SMART COLORANTS:
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CASE: APPLICATION-SPECIFIC STRATEGY

CHALLENGE:

SELECTING ONE COLOR TECHNOLOGY OR ANOTHER FOR A PORTFOLIO OF PRODUCTS

SOLUTION:

USING BOTH SOLID AND LIQUID COLORANTS

SMART COLORANTS:
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ADDING SPECIAL EFFECTS

**EXAMPLES OF SPECIAL EFFECTS TO
CHOOSE FROM INCLUDE:**

- METALLIC
- PEARLESCENT
- CHROME LOOK
- EDGE GLOW
- SPARKLE/GLITTER
- NEON/FLUORESCENT LOOK
- WOOD GRAIN/STONE/CAMOUFLAGE



SMART COLORANTS:
MAKING THE MOST OF COLOR

CASE: ELIMINATE PAINT, MAINTAIN STYLE

CHALLENGE:

REDUCE COST WHILE MAINTAINING STYLE +
PERFORMANCE

SOLUTION:

METALLIC EFFECT MASTERBATCH



SMART COLORANTS:
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**SELECTING + SIZING
COLORANT EQUIPMENT**

SOLID COLORANTS

- REQUIRE FEEDERS TO DISPENSE PELLETS INTO NATURAL RESIN
- FEEDER SIZING CONSISTENT WITH LETDOWN RATIO + MACHINE RUN RATE
- MULTIPLE FEEDERS CAN BE ADDED TO PROCESSING MACHINERY



LIQUID COLORANTS

- VISCOSITIES CAN VARY, CALLING FOR DIFFERENT TYPES OF PUMPS:
 - PERISTALTIC PUMPS
 - PROGRESSIVE CAVITY PUMPS (AKA POSITIVE DISPLACEMENT PUMPS)



SMART COLORANTS:
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CASE: STREAMLINING COLOR DEVELOPMENT

CHALLENGE:

INEFFICIENCIES + QUALITY ISSUES

SOLUTION:

SWITCH TO A SINGLE COLOR SUPPLIER

SMART COLORANTS:
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ABOUT POLYONE



Reach

6,100 associates | 71 facilities | \$3.2 B 2017 revenue



Global Presence

10,000 global customers | Americas, Europe, Africa, Asia |
Global sales, technical, and manufacturing footprint



Solutions

Specialized polymer solutions | 11 labs and innovation centers |
support for design through manufacturing

SMART COLORANTS:
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QUESTIONS?



THANK YOU

alan.barcon@polyone.com