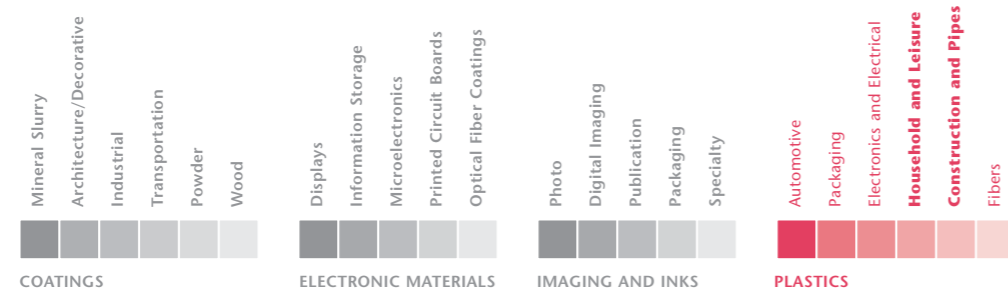


Ciba Worldwide

We do business in more than 120 countries and have sales representatives and technical expertise available for our customers around the world.

P.O. Box
CH-4002 Basel
Switzerland

To find the representative nearest you, visit www.ciba.com/find



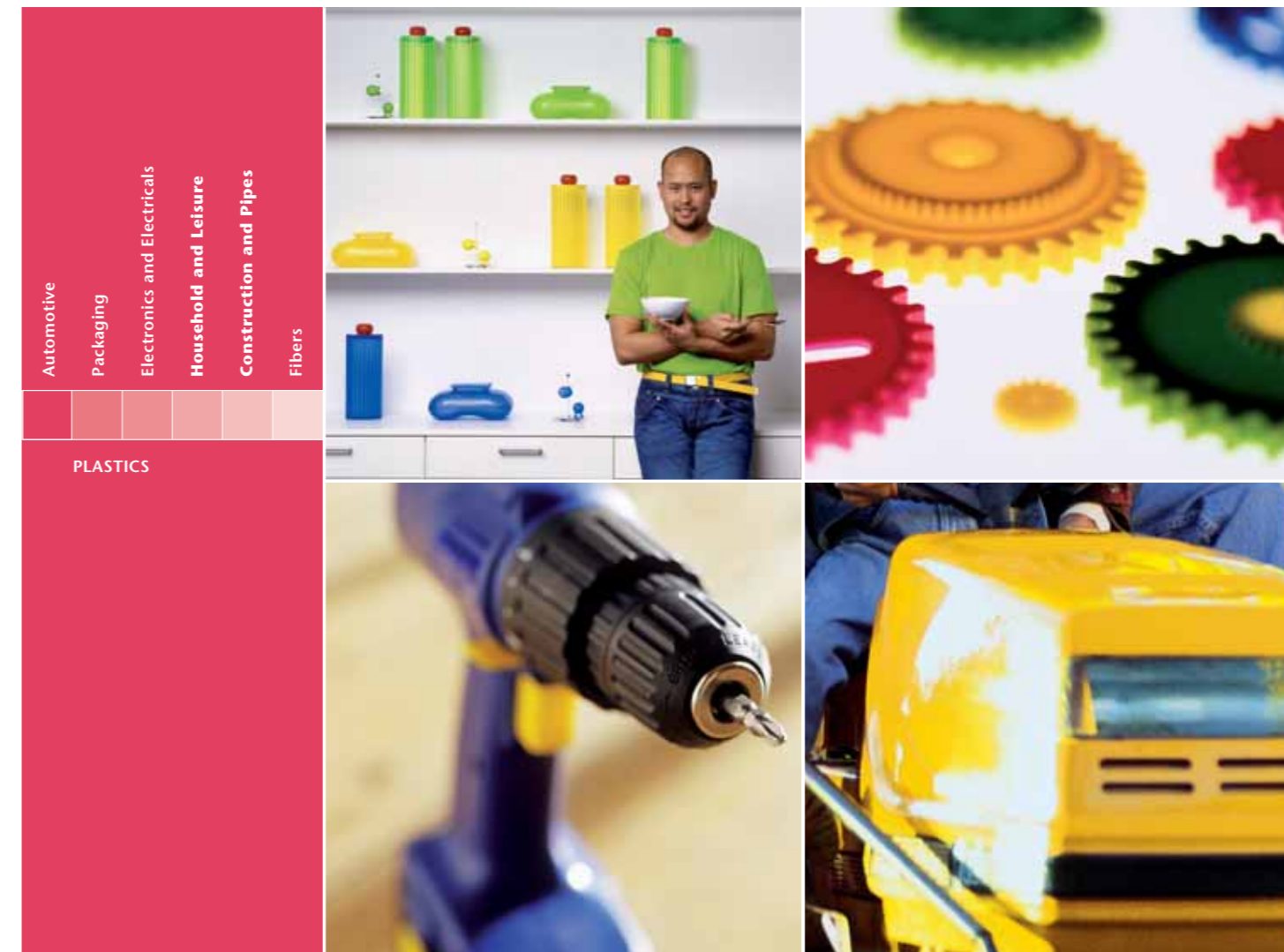
SERVICES


Edition 2007
Copyright © 2007 Ciba Specialty Chemicals Inc. All rights reserved.
All trademarks mentioned are either property of or licensed to Ciba Specialty Chemicals and registered in relevant countries. IMPORTANT: The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach or warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for the intended conditions of use. The product(s) has (have) not been tested for, and is (are) therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended. Please note that products may differ from country to country. If you have any queries, kindly contact your local Ciba Specialty Chemicals representative. Further information at website: www.ciba.com/plastics

pl-51/2007, Printed in Switzerland

Ciba® CROMOPHTAL® Yellow 4GV in polyamide

A green-shade yellow to strengthen your color space



 Ciba Specialty Chemicals is a member of: Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers



Value beyond chemistry

Plastics

Value beyond chemistry

Our Ciba® CROMOPHTAL® Yellow 4GV provides a green-shade yellow to strengthen your color space. Its new and unique chemistry offers robust processing in polyamide 6, 6.6 and others, making it possible to go

yellow for indoor and FDA compliant applications. By bringing in this new pigment, Ciba extends its commitment in polyamide.

Ciba® CROMOPHTAL® Yellow 4GV

Features and value in use

Ciba® CROMOPHTAL® Yellow 4GV, a green-shade yellow, offers chromatic and saturated shades to extend the color space for polyamides. Advanced manufacturing technology and optimized chemistry and physics deliver robust processing characteristics. It is compliant with FDA regulations for food packaging applications.

CROMOPHTAL® Yellow 4GV (PY 215) as a COMPLETELY NEW AND UNIQUE CHEMISTRY extending the scope of available coloring solutions in polyamide molding applications. The chemistry offers the following features:

- Attractive green-shade yellow
- Very high color strength
- Excellent heat stability, even at shading concentrations
- Reduced color shift after cooling
- No significant impact on electrical properties
- Heavy metal free, 100% organic

Benefits

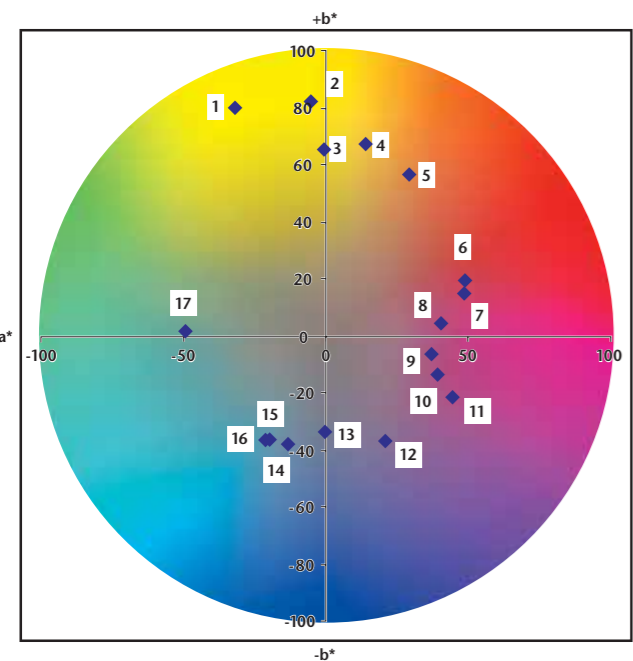
- Wide formulation possibilities/flexibility
- Attractive colors/less pigment dosage
- Processing ease
- Reliable and consistent processing and post-processing
- Compliant in use for demanding applications (electrical/food)
- Environment friendly and safe

CROMOPHTAL® Yellow 4GV has proven itself in polyamide molding applications. We recommend it for all indoor applications, such as electrical housings, lawn, garden equipment and food applications.

Colorspace

Ciba® CROMOPHTAL® Yellow 4GV in combination with Ciba® IRGALITE® Blue GBP enables you to cover a broad area of blue, green and yellow part of the color scope in an unprecedented way using a full organic recipe.

Ciba colorants for polyamide color scope



1	Ciba® ORACET® Yellow 8GF	0.10% + 1% TiO ₂
2	Ciba® IRGACOLOR® Yellow 2GTM	1.50% + 1% TiO ₂
3	Ciba® CROMOPHTAL® Yellow 4GV	0.25% + 1% TiO ₂
4	Ciba® CROMOPHTAL® Yellow HRP	0.35% + 1% TiO ₂
5	Ciba® ORACET® Orange ES	0.08% + 1% TiO ₂
6	Ciba® ORACET® Red GN	0.19% + 1% TiO ₂
7	Ciba® CROMOPHTAL® Red G	0.24% + 1% TiO ₂
8	Ciba® IRGAZIN® DPP Rubine TR	0.11% + 1% TiO ₂
9	Ciba® CROMOPHTAL® Rubine 4N	0.35% + 1% TiO ₂
10	Ciba® CROMOPHTAL® Magenta P	0.26% + 1% TiO ₂
11	Ciba® ORACET® Red 5B	0.08% + 1% TiO ₂
12	Ciba® CROMOPHTAL® Violet GT	0.07% + 1% TiO ₂
13	Ciba® CROMOPHTAL® Blue A3R	0.15% + 1% TiO ₂
14	Ciba® CROMOPHTAL® Blue BCF	0.09% + 1% TiO ₂
15	Ciba® CROMOPHTAL® Blue 4GNP	0.11% + 1% TiO ₂
16	Ciba® IRGALITE® Blue GBP	0.11% + 1% TiO ₂
17	Ciba® IRGALITE® Green GFNP	0.21% + 1% TiO ₂

Color positioning realized with 1/3 ISD values.

Ciba® CROMOPHTAL® Yellow 4GV Enables efficient and exciting green shades in polyamide

