# ECONYL®



# In Plant colorants

for water based coatings



Work as a TEAM to deliver to our customers high quality products, substantial services and competitive prices. To be your real TINTING PARTNER.

### **ECONYL®** In Plant colorants



**ECONYL®** colorants are highly concentrated, binder-free and solvent-free, ready-to-use water-based pigment dispersions.

**ECONYL®** colorants are environment-friendly APEO & VOC free (VOC < 1 g/L) in accordance with EU-ECOLABEL and are recommended for In-Plant tinting of various water and solvent based paint systems.

# **ECONYL®** Compatibility

ECONYL® colorants are compatible with a very wide spectrum of resin systems such as:

- VAM copolymer emulsions
- Acrylic copolymer emulsions
- Styrene acryl emulsions
- Alkyd resins emulsions
- Thermoplastic acrylic resins

- Long and medium oil alkyd resins
- Woodstains (water & Solvent based),
- Water based epoxies
- PVA
- Veova

**ECONYL**® colorants offer a highly competitive price-to-quality ratio while containing premium quality pigments. Maximum stability and dispersibility are guaranteed due to patented wetting and dispersing additives.

**ECONYL**® colorants finely ground to be exceptionally suitable for gloss and satin paints, both for water-based and solvent-based products. Unlike many commercially available colorants, they have a minimal impact on paint properties such as gloss, rheology, hardness, and drying time.

#### **ECONYL®** Advantages

#### **Specifications**

**ECONYL®** colorants are manufactured under very tight specifications of both volumetric and gravimetric color strength, as well as for the colorimetric values of DE, DH and DC:

| Volumetric color strength  | 100 ± 2.5%  |
|----------------------------|-------------|
| Gravimetric color strength | 100 ± 2.5%  |
| DE                         | ≤ 0.70      |
| DH (Hue)                   | $0 \pm 0.5$ |
| DC (Chroma)                | $0 \pm 0.5$ |

#### **Color Matching**

**ECONYL**® colorants are also available with color matching support through the **LEOMIX**® **PRO** software for In-Plant use.

This enables cost-efficient, accurate, and fast production of any requested color both manual and automatic.

# ECONYL® In Plant colorants

**ECONYL®** colorants are the latest generation low VOC and APEO free aqueous dispersions of organic and inorganic pigments design to meet special technical requirements.

**ECONYL®** colorants are an excellent choice for the following applications:

- Paints and texture coatings
- Wood finishing
- Natural rubber
- Textile
- Paper

- · Soaps detergents and cleaning agents
- Latex dispersions
- Nonwoven
- Seed treatment



LEONICE is a European multinational company with its core business into manufacturing colorants and offering turn-key Point Of Sales tinting systems to the paint manufacturers.

LEONICE is formed by the pioneers of tinting technology in Europe with an aim of providing the Best-In-Class colorants combined with LEOMIX® Color System marketing platform to enable a competitive edge to our customers in their respective markets.

LEONICE's modern production facilities combined with long production experience & high production capacity ensures consistent quality within very tight specifications and prompt delivery. Innovative production process & filling makes efficient production of customized colorants including special packaging and labelling.

Our teams of specialists based in our state of the art laboratories offer a full range of products & services to meet specific requirements of the individual paint manufacturer such as:

- Color matching services and database creation
- Customized Tinting Solutions
- Development of Drop In colorants
- Customized High Exterior Durability & Solar Reflection coloring systems

Exclusive technology allows us to upgrade existing tinting systems with minimum cleaning effort and delay. Our customers can use new generation products, save money and effort.

# ECONYL® Organic colorants

| Semi-Mass Tone | COLOR       | CODE | Color<br>Index | Pigment<br>Content in %* | Light F | astness*<br>1/25 SD | Weathering<br>S-MT | Fastness*<br>1/25 SD | Heat<br>Fastness* | Alkali<br>Fastness* |
|----------------|-------------|------|----------------|--------------------------|---------|---------------------|--------------------|----------------------|-------------------|---------------------|
|                | YELLOW      | YE1  | PY 74          | 52                       | 7-8     | 6-7                 | 4-5                | 3                    | 140°C             | 5                   |
|                | YELLOW      | YE2  | PY 3           | 52                       | 7       | 6                   | 4                  | 3                    | 140°C             | 5                   |
|                | YELLOW      | YHF  | PY 154         | 30                       | 8       | 8                   | 5                  | 5                    | 180°C             | 5                   |
|                | YELLOW      | YR2  | PY 65          | 44                       | 7       | 6                   | 4                  | 3                    | 140°C             | 5                   |
|                | YELLOW      | YR1  | PY 83          | 40                       | 7-8     | 6-7                 | 4                  | 3                    | 200°C             | 5                   |
|                | ORANGE      | OR1  | P0 73          | 40                       | 8       | 7-8                 | 5                  | 4                    | 180°C             | 5                   |
|                | RED SCARLET | RHF  | PR 168         | 24                       | 8       | 8                   | 5                  | 5                    | 180°C             | 5                   |
|                | RED         | RD1  | PR 254         | 44                       | 8       | 7                   | 5                  | 4                    | 200°C             | 5                   |
|                | RED         | RLF  | PR 112         | 48                       | 6-7     | 6                   | 4                  | 3                    | 180°C             | 5                   |
|                | MAGENTA     | MG1  | PR 122         | 30                       | 7-8     | 7                   | 4-5                | 4                    | 200°C             | 5                   |
|                | VIOLET RED  | VR1  | PV 19          | 25                       | 6-7     | 7                   | 3-4                | 3-4                  | 200°C             | 5                   |
|                | VIOLET      | VL1  | PV 23          | 30                       | 8       | 7-8                 | 4-5                | 4                    | 160°C             | 5                   |
|                | BLUE        | BL1  | PB 15:1        | 47                       | 8       | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | BLUE        | BL3  | PB 15:3        | 52                       | 8       | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | BLUE        | BL4  | PB 15:4        | 40                       | 8       | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | GREEN       | GR1  | PG 07          | 52                       | 8       | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | BLACK       | BK2  | PBk 7          | 42                       | 8       | 8                   | 5                  | 5                    | 200°C             | 5                   |

# ECONYL® Inorganic colorants

| Semi-Mass Tone | COLOR            | CODE       | Color<br>Index | Pigment<br>Content in %* | Light Fa | astness*<br>1/25 SD | Weathering<br>S-MT | Fastness*<br>1/25 SD | Heat<br>Fastness* | Alkali<br>Fastness* |
|----------------|------------------|------------|----------------|--------------------------|----------|---------------------|--------------------|----------------------|-------------------|---------------------|
|                | BIVA YELLOW      | YX1        | PY 184         | 69                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | YELLOW OXIDE     | YX2        | PY 42          | 65                       | 8        | 8                   | 5                  | 5                    | 180°C             | 5                   |
|                | YELLOW OXIDE     | <b>ҮХЗ</b> | PY 42          | 58                       | 8        | 8                   | 5                  | 5                    | 180°C             | 5                   |
|                | ORANGE OXIDE     | YOX        | PY 42          | 58                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | RED OXIDE (R)    | RX1        | PR 101         | 67                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | RED OXIDE (B)    | RX2        | PR 101         | 66                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | RED OXIDE (H)    | RX3        | PR 101         | 74                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | COBALT BLUE      | BX1        | PB 28          | 60                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | ULTRAMARINE BLUE | BX2        | PB 29          | 58                       | 8        | 8                   | 4-5                | 4-5                  | 200°C             | 5                   |
|                | GREEN OXIDE      | GX1        | PG 17          | 70                       | 8        | 8                   | 5                  | 5                    | 200°C             | 5                   |
|                | BLACK OXIDE      | ВКХ        | PBk 11         | 58                       | 8        | 8                   | 5                  | 5                    | 180°C             | 5                   |
|                | WHITE            | WX1        | PW 6           | 70                       | 8        | n/a                 | 5                  | n/a                  | 200°C             | 5                   |

<sup>\*</sup> These values should only be used as guidelines

## **In-Plant Supplements**

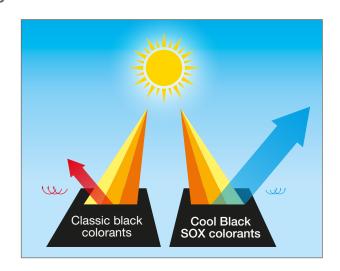
#### **ECONYL®** Cool Black colorants

ECONYL® Cool Black colorants allows the production of unique grey to strong black colors with High Total Solar Reflection (TSR).

This enables the launching of premium series such as Heat Reflective Paints or Cool Paint.

Our In-house developed technology platform helps to create special databases based on TSR.

| CODE  | Color Index | Pigment Content* | TSR value |
|-------|-------------|------------------|-----------|
| S0X 1 | PBK 33      | 58%              | 14%       |
| SOX 2 | PBK 29      | 74%              | 24%       |
| SOX 3 | PBK 32      | 30%              | 42%       |



#### **ECONYL®** Transparent Oxide colorants

**ECONYL®** transparent Iron Oxide colorants are very finely ground, making them exceptionally suitable for wood varnishes and gloss paints.

At the same time, these transparent colorants do not affect important physical properties of the paint, such as weather resistance and UV protection.

Due to their transparent nature, the wood structure remains visible.

| COLOR        | CODE  | Color Index | Pigment Content* |
|--------------|-------|-------------|------------------|
| YELLOW OXIDE | TY-HC | PY 42       | 44%              |
| RED OXIDE    | TR-HC | PR 101      | 44%              |



#### ECOWHITE SU® brightener

**ECOWHITE SU®** is a VOC free optical brightener for water and solvent based paints. Its unique composition shows a whitening effect even at very low concentrations allowing a high quality brilliant white appearance to the paint.









