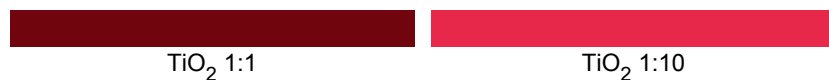


## VERSAL RED HF3C 01



### Characteristic

|                |                 |
|----------------|-----------------|
| C. I.          | Pigment Red 176 |
| C. I. No.      | 12515           |
| CAS No.        | 12225-06-8      |
| Chemical Class | Benzimidazolone |

### Properties

|                              |     |
|------------------------------|-----|
| Oil Absorption [ml/100 g]    | 88  |
| Density [g/cm <sup>3</sup> ] | 1.5 |
| Bulking Volume [l/kg]        | 4.4 |

### Fastness

|                      |          |
|----------------------|----------|
| Linseed Oil          | 5        |
| White Spirite        | 5        |
| DEHT                 | 5        |
| Xylene               | 4-5      |
| Acetone              | 2-3      |
| Butylacetate         | 3-4      |
| Ethanol              | 3-4      |
| Water                | 5        |
| HCl 2.5%             | 5        |
| NaOH 2.5%            | 5        |
| Light - Full Shade   | 6-7      |
| Light - 1/1          | 6-7      |
| Light - 1/3          | 6        |
| Weather - Full Shade | 4        |
| Weather - 1/1        | 3-4      |
| Weather - 1/3        | 3-4      |
| Overspray            |          |
| Heat Resistance [°C] | P<br>280 |
| Migration            | 5        |

P - in Plastics

**Application Possibilities**

|                                      |                    |
|--------------------------------------|--------------------|
| Printing Inks - Nitrocellulose       | ●                  |
| Printing Inks - Water based          | ●                  |
| Printing Inks - Decorative Laminates | ●                  |
| Printing Inks - Offset               | ●                  |
| Printing Inks - UV Curable           | ●                  |
| Plastics - Polyolefines              | ●                  |
| Plastics - PVCp                      | ●                  |
| ● main application                   | ○ side application |

**Other Informations**

|            |           |
|------------|-----------|
| Shelf Life | 48 months |
|------------|-----------|

**Testing methods**
**Density**

- determined by ČSN EN ISO 787-10: 1997 (67 0520) in  $v \text{ g/cm}^3$

**Bulking Volume**

- denotes the volume of 1 kg of loosely poured pigment, expressed in litres

**Oil Absorbtion**

- determined by ČSN EN ISO 787-5: 1997 (67 0520) in ml/100 g pigment

**Fastness to Solvents**

- colouring of solvent after 24 h at 20 °C according to ISO grey scale is determined; degree 1 denotes the lowest fastness, degree 5 the highest one

**Fastness to Reagents**

- colouring of reagents after 24 h at 20 °C according to ISO grey scale is determined; degree 1 denotes the lowest fastness, degree 5 the highest one

**Light Fastness - Xenotest**

- determined by ČSN EN ISO 105-B02: 2000 (80 0147) and evaluated in 1/3 and 1/1 of standard depth and in full shade; determined according to blue scale, by it degree 1 denotes the lowest fastness, degree 8 the highest one

**Weathering Fastness - Xenotest**

- determined by ČSN EN ISO 105-B04: 1998 (80 0171) and evaluated in 1/3 and 1/1 of standard depth and in full shade; determined according to grey scale, by it degree 1 denotes the lowest fastness, degree 5 the highest one

**Overspray Fastness**

- assessment of bleeding into a white nitrocellulose combination lacquer for 60 min. at 70 °C against ISO grey scale; by it degree 1 denotes the lowest fastness, degree 5 the highest one

**Heat Resistance**

- the values quoted indicate up to what temperature the pigments do not significantly alter; these are guide values which can be influenced by the binder used and the period of exposure to high temperature

**Migration Fastness**

- assessment of bleeding into a white polyvinylchloride sheet for 24 h at 70 °C against ISO grey scale; by it degree 1 denotes the lowest fastness, degree 5 the highest one; no data means that the pigment is not recommended for dyeing of PVC

**Fastness to plasticizers**

- colouring of plasticizer (diethylhexylterephthalate) after 24 h at 20 °C according to ISO grey scale is determined; degree 1 denotes the lowest fastness, degree 5 the highest one