The information provided is based on extensive use and laboratory testing and is believed to be a reliable indication of the results that may be expected. The data is offered only as a guide to performance, without guarantee or warranty of any kind. Since many variables have a strong influence on pigment performance the user is encouraged to evaluate each product in his own laboratory.

**SPECIFICATIONS AND PROPERTIES**

**Chemical Type**
Butanamide, 2,2'\-[(3,3'-dichloro[1,1'-biphenyl]-4,4'diyl)bis(azo)]bis[N-(4-chloro-2,5-dimethoxyphenyl)-3-oxo-

**Colour Index Name**
Pigment Yellow 83

**CAS No.**
5567-15-7

**Physical Form**
Yellow Powder

<table>
<thead>
<tr>
<th>SPECIFICATIONS:</th>
<th>LIMITS</th>
<th>TEST METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masstone Shade</td>
<td>Max. Delta E* 2.0 of Std.</td>
<td>DCC TM 0001 (1)</td>
</tr>
<tr>
<td>Tint Strength</td>
<td>+ 5% of Std.</td>
<td>DCC TM 0001 (1)</td>
</tr>
</tbody>
</table>

**GENERAL DATA (TYPICAL VALUES):**

- **Specific Gravity**
  1.39 g/cc
  - DCC TM 3101B (1)

- **Oil Absorption**
  44
  - ASTM D-281-84 (Fasig Method)

- **Moisture**
  <2.0%
  - ASTM D-280-81

(1) Test Methods available from DCC on request.

**PROPERTIES:**

**BLEED RESISTANCE**
- Ethyl Acetate --- Very Good
- Ethyl Alcohol --- Very Good
- Cellosolve ------ Very Good
- D.B.P. --------- Very Good
- Glycol ----------- Excellent
- Linseed Oil ----- Very Good
- MEK -------------- Very Good
- Mineral Spirits - Very Good
- Water (cold) ---- Excellent
- Wax (Paraffin) -- Excellent
- Xylene -------- Good

**CHEMICAL RESISTANCE**
- Dilute Acid --------- Very Good
- Dilute Alkali ------- Very Good
- Soap --------------- Excellent

**HEAT RESISTANCE**
- 120°C/30 minutes --Ink--- Very Good
- 120°C/45 minutes --Paint-- Very Good
- 150°C/20 minutes --Paint-- Good
- 165°C/15 minutes --Paint-- Good

**HEAT STABILITY (H.D.P.E.)*
- Heat stable to 220°C+ (428°F+), 5-minute dwell time, 1% pigment.

**LITHOGRAPHIC PERFORMANCE**
- Aqueous -------------- Very Good
- Alcoholic ---------- Very Good

**WEATHERFASTNESS - PAINT (W/O or Florida)**
- Full Strength ----- Good
- TiO₂ Tint (1:10)----- Fair

**LIGHTFASTNESS - INK (72 hr. F/O)**
- Full Strength --- N/A
- TiO₂ Tint (1:10)--- N/A

**WEATHERFASTNESS - PAINT (W/O or Florida)**
- Full Strength ----- Good
- TiO₂ Tint (1:10)----- Fair

**SPECIAL COMMENTS:**
Shade & strength determinations are made with the aid of a Macbeth Colour Computer, under the following conditions: CIELAB, 10 degree observer, D65 light source, UV & gloss included.

* At temperatures above 200°C, when incorporated in polymers, the pigment can be decomposed to form trace amounts of coloured azo dyes which can decompose further to form measurable amounts of 3,3' dichlorobenzidine, which is a suspect human carcinogen.

**TECHNICAL SERVICE LAB**

**QUALITY CONTROL LAB**

**DATE OF ISSUE:** 19th April 2011

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