

# DAI PHU CO.,LTD

Lot No: D2/1- D3/1, Road 1B, Vinh Loc industrial Park, Binh Tan District, Hochiminh City, Vietnam

Tel: (84-8) 3765 2522 (4 lines) - 5425 0611 - 5425 0612

Fax: (84-8) 3765 3386

# OXYPLAST EPOXY POWDER COATING DP6 / F6

#### **DESCRIPTION**

**OXYPLAST DP6** / **F6** is a pure epoxy based thermosetting powder which provides very low gloss films showing a perfect flow-out.

This type of powder is used as pure decorative coating but special formulae are applied on solar panels as an ideal infra-red absorption element.

In light colours, **OXYPLAST DP6** / **F6** films are less sensitive to yellowing than the F5 quality.

### PROPERTIES OF THE POWDER

Melting range (Kofler) : 80 - 104  $^{\circ}$ C Specific gravity (DIN 55990/3) : 1.35 - 1.65

Particle size distribution (Laser Diffraction) (DIN 55990/2, air flow sieve)

 $% \ge 100 \text{ μ}$  : 1 – 5 % > 32 μ : 55 – 65

Gel time  $180 \, {}^{0}\text{C}$  (DIN 55990/8) : 150 - 200 seconds

#### POWDER APPLICATION

**OXYPLAST DP6** / **F6** can be applied by electrostatic spraying using classic devices which can provide a negative tension of 60 - 80 Kilovolts.

The curing process of the powder will occur in a suitable convection oven.

Curing schedule: 10 minutes at 200 °C (metal temperature).

## PROPERTIES OF THE COATING

The general properties of the coating are determined on degreased cold rolled steel. However, in order to obtain optimal anticorrosion properties, it is advised to apply a chemical pretreatment prior to powder coating application:

For Steel : Iron or Zinc Phosphate For Galvanized Steel : Chromate treatment

For Aluminium : Chromate treatment (DIN 50939)

OXYPLAST DP6 / F6 PROPERTIES OF THE COATING

Substrate : cold rolled steel; degreased

Curing schedule : 10 min / 200 0C

Thickness

The smooth surface : 60 - 80 microns

E-mail: <u>daiphuoxyplast@vnn.vn</u> hoặc <u>phongkinhdoanh@daiphuoxyplast.com</u> hoặc <u>daiphu pkd@yahoo.com.vn</u>, Website: //www.daiphu.com.vn



ISO 9001:2008

# DAI PHU CO.,LTD

Lot No: D2/1- D3/1, Road 1B, Vinh Loc industrial Park, Binh Tan District, Hochiminh City, Vietnam

Tel: (84-8) 3765 2522 (4 lines) - 5425 0611 - 5425 0612

Fax: (84-8) 3765 3386

The sanding surface : 60-90 microns (depends on the surface) The wrinkle surface : 80-150 microns(depends on the surface)

Gloss (ASTM D-523 60 0) : 3 – 10%
Flow-out : very good
Buchholz hardness (DIN 53153) : 100 - 110
Persoz hardness (NF-T-30016) : 250 seconds

Pencil hardness (Wolff-Wilb.) :  $\geq$  H Clemen hardness :  $\geq$  3 kg Erichsen (DIN 53156) : > 5 mm

Impact (ASTM D-2794)

 $\begin{array}{ll} \text{Direct} & : \geq 40 \text{ kg.cm} \\ \text{Reverse} & : \geq 25 \text{ kg.cm} \\ \text{Conical mandrel (DIN 53152)} & : 10 - 20 \text{ mm} \end{array}$ 

Adhesion (DIN 53151) : Gt=0

### **CORROSION RESISTANCE**

**OXYPLAST DP6** / **F6** has been tested in the saltspray cabinet according to ASTM B 117-73, on different substrates.

IRON PHOSPHATE

ZINC PHOSPHATE

CHROMATED GALVANIZED STEEL

1000 H : 8 mm undercutting
1000 H : 4 mm undercutting
500 H : 8 mm undercutting

CHROMATED ALUMINIUM : no change

#### STORAGE STABILITY

Due to its high Tg (Glass Transition Temperature) and its specific chemical composition, **OXYPLAST DP6/F6** powder can be stored for more than one year at 25°C without showing any change in free-flowing properties.

The coating obtained after this period will still have optimal characteristics.

Best use within 12 months from production date.

All the information given in this Data Sheet is the result of our research work and experience. It is given in good faith and with every belief in its accuracy but cannot be considered as a formal warranty.

In accordance with OXYPLAST BELGIUM policy of product development, this specification is subject to change without notice.

# OXYPLAST DP6 / F6 / CW2 ADDENDUM TO TECHNICAL DATA SHEET DP6 / F6 / ENG-99/3



ISO 9001:2008

# DAI PHU CO.,LTD

Lot No: D2/1- D3/1, Road 1B, Vinh Loc industrial Park, Binh Tan District, Hochiminh City, Vietnam

Tel: (84-8) 3765 2522 (4lines) - 5425 0611 - 5 425 0612

Fax: (84-8) 3765 3386

OXYPLAST BELGIUM also offers the Epoxy-polyester powder coating qualities in special decorative effects like WRINKLE type "CW2".

The properties, mechanical and corrosion resistance of DP6 / F6 / CW2 are similar to those of the DP6 / F6 described in the present technical data sheet.