

**DAI NIPPON TORYO CO.,LTD**

878 Nishinomom Mitsubuchi

Komaki-city Aichi Japan

Tel +81-568-76-5573

Fax +81-568-72-5960

## *POWDER COATING*

# V-PET#4500SW

### **1. Resin Type**

Polyester / Poly-urethane  
Thermosetting Powder Coating

### **2. Properties**

- High Weather Durability
- Smooth finish
- Tough and high corrosion resistance

### **3. Typical Applications**

Fence, Guard-rail, Traffic sign, Vending machine, Tractor,  
Another metal goods

### **4. Chemical Composition**

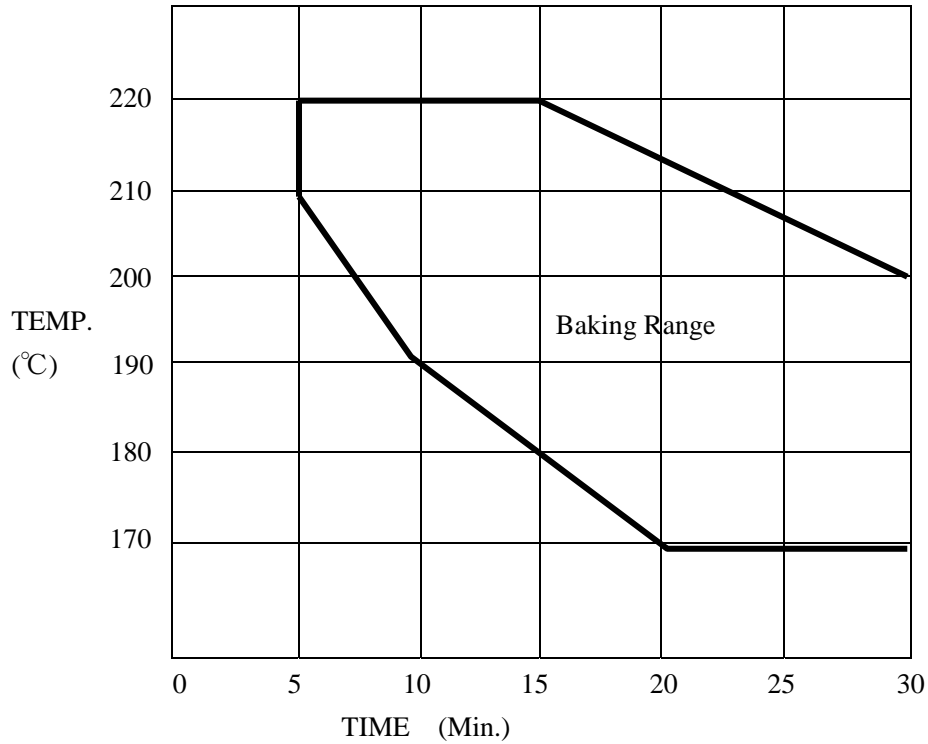
Resin and Hardener	• • • • •	64
Pigments	• • • • •	35
Additives	• • • • •	1

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Total 100 (%)

※This table is standard formulation. (White Colored)

## 5. Permitted Baking Schedule



## 6. Powder Properties and Coating Standard

Items	Performance	Notes
Storage Stability	6 months at 30°C (6 months at 85F)	
Specific Gravity	1.4~1.7	Density meter
Particle Size (mean-in microns)	30~40 $\mu$ m	Laser diffraction method Particle Size Analyzer
Baking Schedule	180°C×20min (360F×20min)	
Film Thickness	60~80 $\mu$ m	For standard Application

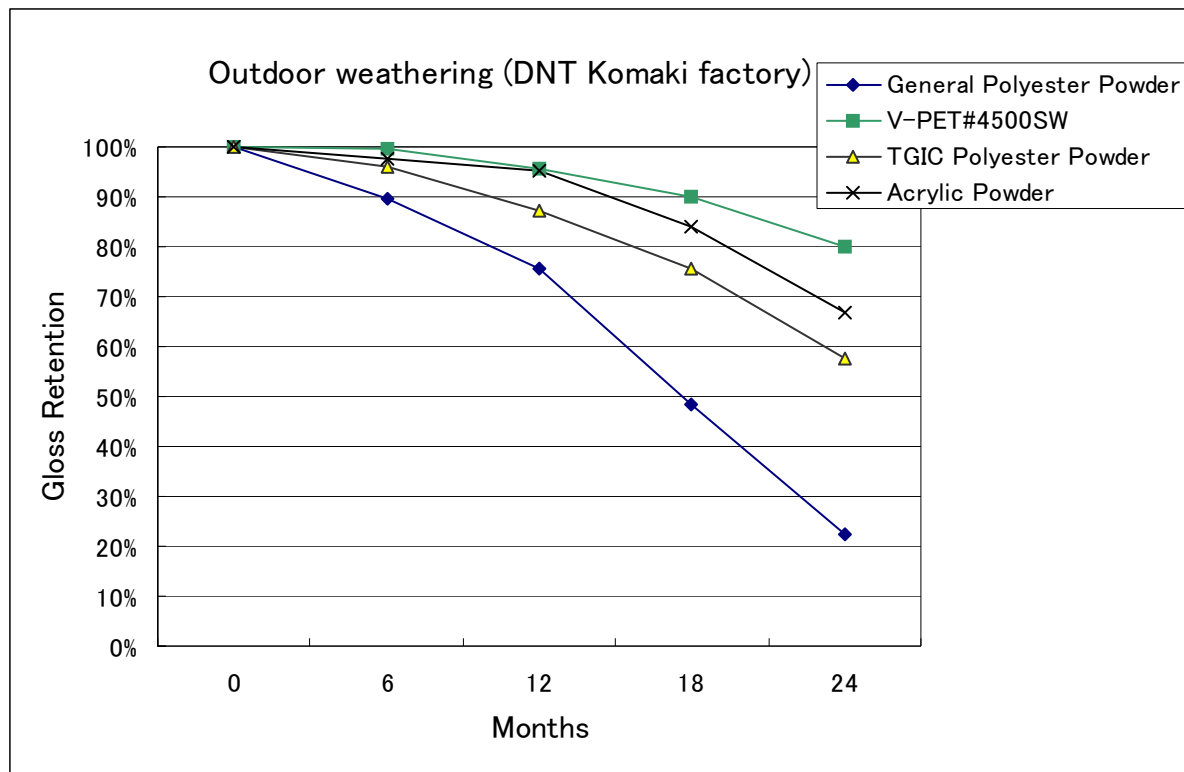
## 7. Film Properties

### V-PET#4500SW WHITE

Items	Test method	Result
<b>HARDNESS</b>	Pencil hardness(JIS K 5600 5-4)	H
<b>ADHESION</b>	1mm squares(Remaining squares/100) (JIS K 5600 5-6)	100/100
<b>Erichsen indentation</b>	Erichsen tester(JIS K 5600 5-2)	3mm
<b>Impact resistance</b>	Du Pont(1/2"×500g)(JIS K 5600 5-3)	40cm
<b>Accelerated Weathering</b>	Gloss retention after 1000 hours of sunshine-weather-o-meter test	Gloss retention 80% or more
<b>Salt Spraying Test</b>	5%NaCl Salt solution spray 35°C 500hours (JIS K 5600 7-1)	3mm or less
<b>Humidity Test</b>	50°C 98%RH 500hours (JIS K 5600 7-2)	No effect
<b>Acid Resistance</b>	5% H <sub>2</sub> SO <sub>4</sub> -aq 20°C 72hours	No effect
<b>Alkali Resistance</b>	5% NaCO <sub>3</sub> -aq 20°C 72hours	No effect

Bonderite 3020 (Treatment with Zinc Phosphate ) panels were used for all tests and Electro statically sprayed at 60~80micro meter thickness.

## 8. Outdoor Weathering of Several Powder Coatings



## **9. Handling & Safety Precautions**

- The area adjacent to the coating operation should be properly ventilated.
- Cure ovens must be exhausted to the outside atmosphere.
- All dusts are respiratory irritants, inhalation of the dust should be avoided.
- If skin contact occurs, wash thoroughly with soap and water.
- Should eye contact occur, flush with water immediately and procure medical attention.
- To avoid static electricity build-up, properly ground all equipment.
- Provide dust collection equipment with adequate explosion venting: dust clouds of any finely divided organic material can be ignited by open flame or electrical sparks.