

SHREE



## **Orion Photosensitive Systems**

241 ½ F, Shaniwar Peth, F.P No.-534,  
Radha Infinity, 4<sup>th</sup> Floor,  
Karad 415110

District-Satara, Maharashtra, India  
Mobile No – 00 91 98230 64420  
Mobile No – 00 91 91755 34420  
E-Mail - sales@orionppp.com

**Method of Use –**

**Multiple Polymer Based Ready to Use**

**ORION NEXT**

**Coating Solution to prepare “Developer Free”  
Negative Working UV CtCP Printing Plates**

**“Orion Next” Multi Polymer  
CtCP - ONE PACK Coating Solution  
Open in Yellow Safe Light Only**

**This product is made from Multiple Polymers combined with Suitable Photo initiators and Other Additives. Coating Solution dries to tack free dryness after coating on Anodised and Post treated Aluminium Substrate. Drying is completed by flow of Hot Air.**

## **Sample Description**

The sample provided to you for testing is packed in 1 bottle.

- 1) Weight of Orion Next CtCP -ONE PACK is 100 Grams X 1= 100 Grams.
- 2) We have added a Light Blue colorant dye in the solution.

### **Preparation for testing.**

The Orion Next – ONE PACK is a ready to use coating solution. Standard process of filtration of liquid should be followed before coating.

### **Coating on Aluminium Substrate.**

Aluminium substrate should be 1) Electrically Grained 2) Anodised 3) Treated for hole filling procedure (Post Anodic Treatment)

Ready to use coating solution should be coated on Aluminum substrate by suitable method. (Three Roller Reverse Roll Coater or Slot Die Coater.) Or by Flow coating method for small test pieces.

Coating dry weight should be 1.7 to 1.8 grams per square meter, or as per your requirement.

Plate should be dried by hot air of suitable temperature.

### **Self-Curing of coating.**

Coated Aluminium substrate should be stored in cool and dark place. Storage room temperature should be 27 to 31 Degrees Centigrade.

Self-Curing period. Minimum 24 Hours. Thicker coating weight requires more self-curing time.

### **Exposing of coated substrate**

Coated and cured plates should be exposed on Laser Plate Setters designed for UV CtCP Plates. Exposing devices popular in industry can be used.

Ultraviolet Laser Radiation- Spectral Sensitivity 360 nm to 375 nm

Energy-80 mj to 90 mj Per Square Centimeter (Only indicative)

**Rip- Negative Matrix (Plate Setter Should be set to expose the plate in Negative Mode. )**

Safe Light- Yellow

**Developing of coated and exposed substrate**

**Developer- Plain Tap Water**

**Plate Processor Suitable for Positive UV CtCP Plates can be used. Developer tank is to be filled with plain water in place of Alkaline Developer.**

**Developing Water Temperature -23-27 Degrees Centigrade.**

**Processor speed- As per Dip Length in water tank.**

**Dip Time – 20 Seconds to 25 Seconds or more.**

**Precautions-**

- 1) Do not take the exposed but (Un Developed) or unexposed plates of ORION NEXT in day light or in white light – before completely removing the unexposed coating from the plate. Otherwise, non-Image areas will get cured and plate will print background.**
- 2) Gum up the developed plate as per standard process.**
- 3) Allow the plate to completely dry before putting on Press.**

**Note.**

**The results depend upon**

- 1) Coating Weight per Square Meter**
- 2) Aluminium Substrate Condition- and Post Anodic Treatment (PAT)**
- 3) Drying Temperature and Dwell time in oven tunnel.**

**Advantages of this Technology.**

**As you are aware, society is worried about pollution caused by various industries.**

**We, the Printing Industry, should contribute our efforts to reduce use of chemicals in Printing Presses.**

**ORION NEXT Developer free plates make a small contribution to every body's efforts. With use of ORION NEXT Plates printers -**

- 1) Prevent discharge of used Strong Alkaline Plate Developer in city sewerage systems.**
- 2) Injury caused to workers by handling Corrosive Alkaline Plate Developer is totally avoided.**
- 3) Maintaining strength of Alkaline Plate Developer, is a daily headache to Plates Processor Operators. This daily work is completely avoided. Gives peace of mind to Workers and Management.**
- 4) Press owners save on Purchase cost of Alkaline Developer.**