

Comparison of Each Type for Zinc Flake Coating Product

Table 1

| Contents | | Solvent-Bas e | Water-Base | |
|-------------|--------------------------------|--|---|---|
| | | | N(JPN) | L'BESTE <i>GAT</i> |
| General | Curing Condi tion | 15~20min. @2 50°C | 15~20min. @3 40°C | 15~20min. @250°C |
| | Energy Cost | Relatively Low er | Relatively High er | Relatively Lower |
| | Applicable R ange | Wide | Narrow(Limita tion) | Wide |
| | Environment | High VOCs | Low VOCs | Low VOCs |
| | Safety | Flammables | Not Flammable s | Not Flammables |
| Performance | Appearance of the Coated | Acceptable | Relatively Bett er | Relatively Better |
| | Corrosion-Re sistance | 10~12µm for 1,000 hrs. | 8~9µm for 1,000 hrs. | 8~9µm for 1,000 hrs. |
| | Cathodic Res istance | Relatively Low er | Relatively Low er | Relatively Better |
| | Dust in Asse mbling | Much Occurren ce | Occurrence | A little |
| Workability | Preparation of Material | Simple | Maker-Up Proc ess | Maker-Up Process |
| | Odor | High | Almost Nothin g | Almost Nothing |
| | Stability | Weaken Again st Humidity (Easy Gelation) | Oxidation by ti me passing (65% after 4 weeks) | Oxidation by time passing b ut little (95% after 6 weeks) |
| | Storage | No Contact wit h Humidity | Room Tempera ture (20~30°C) | Room Temperature (20~30°C) |
| | Device for Co ating Bath | Drying Device | Cooling Device for 20~23°C | Cooling Device for 20~23°C |
| | Viscosity Con trol | By Thinner | By Fresh Wate r | By Fresh Water |

Table 2

| Contents | | Solvent Base M(US), D,A(G ER) | Water Base | | |
|----------------------|----------|-------------------------------------|-------------------|---------------------|---------------------|
| | | | N(JPN) | L'BESTE GAT | |
| | | | | X-250 | S-570, 870 C |
| Curing Temperature | | 250°C | 340°C | 270°C | 300°C |
| Binder | | Silane + Organic Binder | Silane | Silane Oligo mer | Silane Oligo mer |
| VOCs Content | | 50% | 20% | 20% | 20% |
| * NSS T (Hour) | Fastener | 1,000 (10~12µm) | 1,000 (8~9 µm) | 1,000 (8~9 µm) | 1,500(8~10 µm) |
| | Disc | 120 (14µm) | 120 (8µm) | 120 (8µm) | - |

Comparison Table for Zinc Flake Coating vs Hot Dip Gal. vs Elec. Galvanized

| Contents | | Zinc Flake Coating | Hot Dip Gal. | Elec. Gal. |
|--------------------------|---------------|---------------------|--------------------|---------------------|
| Appearance | | Silver gray | Silver white | Silver white/yellow |
| Main Components | | Zn, Si, Al | Zn | Zn |
| DFT (Dry Film Thickness) | | 8~10 µm | More than 60 µm | 5 µm |
| NSST | | More than 1,500 Hrs | Below 300 Hrs | Below 120 Hrs |
| Fastening of Fasteners | | Excellence | No Good (Over Tap) | Excellence |
| Hydrogen Brittleness | | Non-occurrence | Occurrence | Occurrence |
| Adhesion with Paint | | Excellence | Average | Average |
| Weldability | Welding State | Excellence | Average | Average |
| | Noxious Gases | Tiny quantity | Tiny quantity | Much quantity |