## **♦**Solvent-based Dispersing agent (Pigment dispersing agent)

+ (Good) / + + (Best) Amine Value Polyester Fluoro/ Silicone Urethane Epoxy Acrylic Alkyd Primary constituent Form **Characteristics Product** / Solvent FLOWLEN Cationic acrylic polymer/ Has effects on wetting and dispersion of carbon black and 16kg 30 Liquid 10 DOPA-15B Xylene premium organic pigments. can Cationic acrylic polymer/ FLOWLEN DOPA-15BHFS Aliphatic hydrocarbon/ 15kg 30 Propyleneglycol Liquid Xylene-free type from FLOWLEN DOPA-15B. can monomethyl ether acetate/n-butanol Has effects on wetting and dispersion of carbon black and FLOWLEN DOPA-17HF Cationic acrylic polymer/ premium organic pigments. In particular, exhibits marked 16kg 30 13 Liquid ++ ++ **PGMEA** increases in the blackness of carbon black. can Improves flooding through post addition. HAPs-free type. Has effects on wetting and dispersion of carbon black and Cationic acrylic polymer/ **IFLOWLEN** premium organic pigments. In particular, exhibits marked 16kg Liquid 40 Xylene/Methyl isobutyl 17 ++ ++ DOPA-22 increases in the blackness of carbon black. can ketone Improves flooding through post addition. Has effects on wetting and dispersion of carbon black and **FLOWLEN** 16kg Cationic acrylic polymer/ premium organic pigments. In particular, exhibits marked 30 13 Liquid DOPA-35 increases in the blackness of carbon black. Cyclohexanone can Improves flooding through post addition. It is excellent in wet dispersion effect of carbon black, organic **FLOWLEN** Mixture of origomer and pigment and inorganic pigment, 18kg 100 15 135 Liquid **DOPA-100** It is also effective for dispersing matte silica and preventing polycarboxylic acid can settling. Can be used with any paint type, whether water-based or solvent-based. Has effects on wetting and dispersion of **FLOWLEN** 18kg Modified polymer 100 60 Liquid inorganic and organic pigments. G-700 contained carboxylic acid can In particular, has effects on improving dispersion stability of silica for delustering of solvent-based paints. Poly amide ester **FLOWLEN** Adsorbs to the surface of pigments and prevents re-16kg 50 Liquid derivative/Solvent 25 10 G-820XF flocculation in pigments. can naphtha/Isobutyl alcohol An anionic polymer dispersant for water-based paints. It's **FLOWLEN** Modified polymer also used with solvent based systems. It works well organic 18kg Liquid | 100 55 ++ contained carboxylic **GW-1500** and inorganic pigments, reduces mill-base viscosity and can groups improves gloss of the paint film. It has ant-flooding effect. Unsaturated **FLOWLEN** Well-suited to prevent flooding, floating, and silking in toning 16kg 52 olycarboxylic 130 Liquid + ++ + **AF-1000** paints. Silicone-free. can acid/Xylene Modified silicone/ FLOWLEN Unsaturated Exhibits anti-flooding without inhibiting the hydrophilia of 16kg 52 110 + Liquid AF-1005 olycarboxylic acid/ hydrophilic paint. can Xylene **FLOWLEN** Granula Nitrogen-containing graft polymer Has effects on wetting and dispersion of carbon black and 15kg 100 35 35 **KDG-2400** premium organic pigments. box Exhibits anti-flooding without inhibiting the hydrophilia of **FLOWLEN** 18kg 100 Nonionic surfactant hydrophilic paint. Superior anti-flooding, anti-floating, and anti-Liquid + D-90 can silking effects in toning paints in particular.

Additive Dosage(%)

As a solid,

3-6% for inorganic pigments, 15-30% for organic pigments,

20-60% for carbon black