



## Using Laponite® in a dipping primer for steel

Guideline formulation		
Mill Base		
Ingredient	Function	Quantity
WATERSOL EP 5500	Resin	230
DMAMP-80	Neutralizing amine	23
n-Butanol	Viscosity reduction	20
DISPEX HDN	Hydrophobic dispersing agent	7
Hombitan R - 210	White (titanium dioxide) pigment	120
Polygloss 90	Extender pigment	20
MICA F	Mica (barrier effect)	45
Talkum A-20	Talc (adhesion improvement)	45
Omycarb 10	Calcium Carbonate extender	140
Let Down		
DI Water		267
Laponite RD (see Note)	Antisettling agent	3
CYMEL 303	Melamine resin (for baking)	70
BYK Catalyst 450	Amine salt of para Toluene Sulfonic Acid	10
Total		1000

After preparation, the formulation was thinned down with 20% water to reach a viscosity low enough for dipping application. After storage at 50°C for 72 hours, no settling or separation was observed.

Note: The Laponite RD powder should be added to the DI water with stirring and allowed to age for 10-15 minutes before addition of the melamine resin.

Formulation provided by DIC Performance Resins

For more information- contact the Laponite team on [help@laponite.com](mailto:help@laponite.com)

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