(Tixolam

Binders / rheology modifiers for glazes specially suitable for manual and robot spraying on vertical or sloped surfaces

Tixolam Series has been developed to meet white-ware glazing requirements:

- short grinding time;
- short unloading from the mill and sieving time;
- no settling to avoid glazes sedimentation in tanks and reservoirs;
- long shelf life of glaze-slips;
- high flow capacity of spray guns;
- rheological behaviour suitable for the application on vertical or sloping surfaces, avoiding dropping and straining problems;
- short drying time, compatible with high speed "robot" glazing systems;
- good texture and even surface;
- homogeneous coating of surfaces;
- good binding action avoiding crawling, excessive release of dust, cracks and other defects

Tixolam gives the glaze slip a proper rheological behaviour suitable for spray glazing, usually in quantity of 0.2 - 0.5 % on dry content of glaze.

The addition of **Tixolam** can be done in different ways according to glaze feature, plant organisation and habits:

- Addition of **Tixolam** in powder form directly into the glaze which has to be made carefully to get a complete and homogeneous dispersion of the binder without formation of clots.
- Total or partial addition in powder form directly into the ball mill. To reduce grinding time, it is also possible to add **Tixolam** only in the last hour of grinding.
- Addition of **Tixolam** into the glaze slip unloaded from the mill is very often done with a predispersed paste composed by parts of Tixolam and parts of water, obtained through a high speed stirrer (standard mixing time: 5-10 minutes). This paste is then kept at rest for 12-24 hours before addition.



Sanitaryware Glaze - 1.77 kg/l 0.35% Tixolam CD 31

The graph shows a moderate thixotropy useful to avoid sedimentation and dropping of the glazes too using standard grade **Tixolam CD 31**. **Tixolam**, due to its chemical composition and like all products of this kind, can be prone to bacterial attacks that can cause sudden changes of rheological characteristics of the glaze; then we recommend the use of antibacterial agents (i.e Carbosan from Lamberti) during glaze preparation to improve its consistency.

The product range			
Series	Viscosity (2% sol.)	Drying time	Rheology
Tixolam CD 31	4000 - 6000 cP	Long/medium	Plastic (with Yield Point)
Tixolam AC 83	3500 - 6000 cP	Medium/long	Plastic (with Yield Point)
Tixolam RB	5500 - 7500 cP	Long	Plastic (with Yield Point)
Tixolam AC 162	8000 – 14000 cP	Long/medium	Plastic (with Yield Point)
Tixolam AM 01	2000 - 3500 cP	Short	Pseudoplastic (no Yield Point)
Tixolam AM 04	1200 – 1800 cP (1 % sol)	Very short	Plastic (with Yield Point)
Tixolam AM 113	2500 - 5500 cP	Medium	Plastic (with Yield Point)
Tixolam CD 456	3000 - 6000 cP	Long/medium	Plastic (with Yield Point)
Tixolam MT 1010	< 1500 cP	Short	Flat