



# PRODUCT DATA

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## GALPRESOL®

**GALPRESOL®** is a unique pretreatment solution for hot dip galvanizing on continuous lines and batch operations. **GALPRESOL** is a breakthrough in process development for hot-dip coating of steel with high levels of aluminum, from 0.001 - 22.0%, producing a smooth, high quality hot-dip galvanized coating with an absence of voids or black-spots.

**GALPRESOL** is the result of 15 years of Research and Development associated with achieving a satisfactory hot-dip zinc/aluminum coating utilizing a flux type process.

**GALPRESOL** is nothing like a conventional galvanizing flux and requires modifications to standard flux maintenance and operating practices. An increased level of aluminum makes the galvanizing process more vulnerable to the oxides and moisture presence on the steel parts, also, the level of surface cleanliness is more critical. The thin layer of aluminum oxide on the zinc bath surface further complicates wetting of the steel parts with the molten zinc metal. The combined chemical action of the pretreatment solution, **GALPRESOL**, and heat energy due to the preheating before dipping into a kettle overcomes these difficulties.

**GALPRESOL** provides very active dissolution of oxides on the steel surface and nullifies deleterious influence of aluminum. At the same time it can withstand preheating about 80°C higher than conventional zinc chloride/ammonium chloride fluxes.

**GALPRESOL** is a member of a family of novel Galvanizing Pretreatment Solutions which have thermal stability at higher than normal preheating temperatures than normal fluxes both on continuous and batch type galvanizing operations. **GALPRESOL**, on strip (wire, tubing) with speeds that allow short residence furnace time, with intensive heat transfer, where heating time does not exceed 10-20 seconds can withstand temperatures as high as 340°C (650°F). If heating time is 40-45 seconds, **GALPRESOL** can be heated to a surface temperature of 300- 320°C (620°F), without degradation. {Conventional zinc chloride-ammonium chloride flux is degraded when heated in same time period above 250°C (480°F)}.

In a batch operation with automatic conveyer lines where residence time in the oven may be 25-30 min, **GALPRESOL** can be heated up to 200°C (400°F) without effecting coating quality. This thermal stability is very useful, when large parts are slowly being dipped in the kettle where a conventional flux could be degraded before the parts are totally immersed.

### CHEMICAL AND OPERATING DATA

APPEARANCE	Clear transparent liquid.
SPECIFIC GRAVITY	1.42-1.43
TOTAL SOLIDS, %	49-51
CONCENTRATE pH	0.5-0.9
USE CONCENTRATION, BAUME'	28-32
USE TEMPERATURE, °C	65 (150°F)

### SAFETY AND HANDLING

**GALPRESOL** is an acidic corrosive material. Use rubber gloves, apron, boots and wear goggles or face shield when handling.