

APPLICATION DATA SHEET

BLACKFAST 971 POLYMER PHOSPHATE

USE: Dilution: 0.60%
Temperature: Ambient to 40°C
Time: 30 seconds to 2 minutes, depending upon coating weight required.

APPLICATION: Blackfast 971 is a completely chromium free and fluoride free conversion coating for use on aluminium extrusions, aluminium and white metal engineered parts, aluminium coil, steel and zinc to greatly enhance corrosion protection and adhesion of subsequently applied coatings. This ensures the absolute minimum removal of aluminium from the metal surface during conversion coating, which gives low levels of sludge and long bath life. Blackfast 971 is a fully built product which cleans and conversion coats in a single stage, greatly reducing process times and cost. Product concentrations are easily controlled by simple titration or by conductivity. The resulting conversion coats are resistant to high temperature accelerated adhesion test – heating in water to 125°C for 2 hours gives no loss of topcoat adhesion. Blackfast 971 is suitable for soak or spray application.

TESTING AND CONTROL Control of the strength of Blackfast 971 working bath is achieved by a simple acid/alkali titration using phenolphthalein as an indicator. The test solution is N/25 Sodium Hydroxide solution.
The test is carried out by taking a 10ml sample of Blackfast 971 working solution and adding a few drops of phenolphthalein, the solution remains clear. The test solution is added until the solution turns a permanent pink end point. Multiply the number of ml of test solution added by the factor 0.29 to convert the solution strength into a percent. An addition of 2.1ml indicates that the working solution is at a strength of 0.6%

- NB.** 1. Testing a 20ml sample and dividing the result by 2 gives a slightly more accurate reading.
2. The pink end point is taken when the pink colour becomes permanent upon shaking. Always be consistent with the shade of pink chosen by yourself as the end point.

TANK MATERIAL All process tanks, piping, pumps and heat transfer surfaces should be fabricated from 316L series stainless steel.

HANDLING AND PERSONNEL SAFETY Normal precautions for handling chemicals should be observed. Blackfast 971 is irritating to eyes and skin. In case of contact with skin, wash thoroughly with plenty of water. In case of contact with eyes irrigate with copious amounts of clean water and seek medical attention immediately
Small spills may be washed to waste with plenty of water. Larger spills should be contained and neutralised with soda ash or builders lime before washing to waste or sweeping up for disposal. Used solutions will normally contain complexed aluminium and will require treatment through a suitable effluent system.

PRODUCT SAFETY DATA SHEET: A safety data sheet is available.

Blackfast 971 is part of the Blackfast range of products for the treatment of iron, steel and aluminium at low temperatures.
Blackfast Chemicals continues to improve the quality and performance of its range of products and reserves the right to modify product formulations without prior notice.

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