

## Fluorescent Powder Concentrate for Wet Method Magnetic Particle Inspection

### DESCRIPTION

ZChek F18C is an oil-based concentrate consisting of prepared liquid concentrate of fluorescent powder. The product is ultra-high sensitive Magnetic particles which are used to detect very fine discontinuities in any ferromagnetic materials. Generally used in aerospace/aviation, forgings, steel bars, billets, automobile, machined and heat-treated components or other engineering applications using wet method fluorescent magnetic particle inspection.

ZChek F18C is to be used with oil-based bath only.

### CONFORMANCE / SPECIFICATION COMPLIANCE

- ASME B & PV Code, Sec. V
- ASTM E 1444
- AMS 3044
- ASTM E 709
- EN ISO 9934-2

### APPLICATIONS

ZChek F18C is designed to detect medium to fine surface and slightly subsurface discontinuities like inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks, and fatigue cracks in Ferro magnetic materials.

### TYPICAL PROPERTIES

<b>Colour Under White Light</b>	Brown
<b>Colour Under Black Light</b>	Yellow-Green Fluorescence
<b>Mean Particle Size</b>	6 Microns
<b>Particle Size Range</b>	1-16 Microns
<b>SAE. Sensitivity</b>	8-9 (Ketos ring)
<b>Max. Operation Temperature</b>	48°C Maximum
<b>Settling Volume</b>	0.15-0.25 ml

## DIRECTIONS FOR USE

Use F18C concentrated liquid at 10 ml per litre of Oil (Z 801 cart oil).

- Shake ZChek F18C container well to suspend the settled particles and to attain uniform distribution of particles in the concentrate.
- Check the concentration of the bath before use at least once in 8 hours using centrifuge tube.
- Parts should be clean and dry prior to testing.
- The bath must be under continuous agitation.
- Using the wet continuous method, the bath is applied to all surfaces of the part. The instant the bath stream is removed from the part the magnetizing current is applied.

## PACK SIZES

- 1 litre Can

## HEALTH & SAFETY

Information on Health & Safety is made available through Material Safety data sheets and the same can be reviewed through the company's website [www.zchem.in](http://www.zchem.in).

## STORAGE & SHELF LIFE

Packed Powders have a shelf life of 5 years if unopened and stored as per ZChem Recommendations.

### Manufactured By:

## ZChem Specialities Pvt. Ltd.

Sy, No. 11/2/6, Puradapalya Village, Tavarkere Hobli, Bangalore – 562130, India

Phone +917349177755 & +917349277755 Email – [info@zchem.in](mailto:info@zchem.in) , Website – [www.zchem.in](http://www.zchem.in)

Disclaimer: We have taken best care to ensure that the information provided in this data sheet is accurate. Our product is guaranteed to conform to the specifications provided. We make no other warranty; hence the liability is limited to replacement of product only.