



MARKET SECTORS:

INDUSTRIAL MRO
AGRICULTURE

AC CODE	CRC CODE	SIZE
-	33317	FF-90 NDT Kit
-	33311	500ml Aerosol FF-90 Cleaner
-	33312	500ml Aerosol FF-90 Penetrant
-	33313	500ml Aerosol FF-90 Developer

FF-90 FLAW FINDER NON-DESTRUCTIVE TESTING KIT

FF-90 is a three step non-destructive flaw finder kit for visual inspection of open to surface cracks, laps and folds on any non-absorbent materials, detecting cracks from 30µm.

KEY FEATURES

FF-90 CLEANER

- Powerful, rapid dry solvent
- Removes grime & contamination
- Use for accurate results

FF-90 PENETRANT

- Highly visible red dye for NDT

- Identifies defects $\geq 30\mu\text{m}$
- Excellent materials compatibility

FF-90 DEVELOPER

- High contrast, opaque white powder
- Clearly indicates defects in welds
- Easily removed after inspection

NEVER ASK A PROFESSIONAL TO USE ANYTHING ELSE!

APPLICATION AREAS

FF-90 can be used to inspect welds, castings and forgings. Use for a 'final check' on the following processes: fabrication and metal work, pressure vessels, rolling mill products, repair facilities, metal alloy plates, castings, metal parts and components, valves and fittings, boilers, furnaces and engines, machining, composite manufacturing and construction for structural components.

DIRECTIONS FOR USE

- Remove any dirt contamination prior to application with FF-90 Cleaner, spray generously and wipe clean with a lint-free cloth.
- Vigorously shake FF-90 Penetrant prior to use. Apply as a light, even film to the surface, saturating all areas to be inspected. Leave to penetrate for 10-20 minutes.
- Remove excess FF-90 Penetrant with a lint-free cloth treated with FF-90 Cleaner. (Taking caution not to spray FF-90 Cleaner directly onto surface as this may remove the Penetrant from flaws.)
- Vigorously shake FF-90 Developer and apply a light coat from a distance of 20cm. Allow to develop for at least 7 minutes, until imperfections are visible. Over time defects will appear as red spots/lines on the white developer.
- Post inspection, clean off developer & treat with an anti-corrosion treatment if necessary.

FF-90 CLEANER

APPEARANCE:	colorless liquid, typical odour
SPECIFIC GRAVITY AT 20°C:	0.716
BOILING RANGE	55 - 120°C
VAPOUR DENSITY (VS AIR =1)	3
FREEZING POINT	<-30°C
FLASH POINT (CLOSED CUP)	<0°C
DYNAMIC VISCOSITY (@ 20°C)	0.5 mPa.s
SURFACE TENSION (@ 20°C, EST.)	21 mN/m
PLASTICS COMPATIBILITY	To be checked(*)
NON-VOLATILES	None
EVAPORATION RATE (VS ETHER = 1)	2.8

(*)Sensitive plastics (e.g. polystyrenes and polycarbonates, need to be checked, particularly when thermal or mechanical stress is involved.

FF-90 PENETRANT

APPEARANCE:	Red liquid
ODOUR	Solvent
SPECIFIC GRAVITY AT 20°C:	0.816
BOILING RANGE (SOLVENT)	180 - 250°C
FLASH POINT LIQUID	>70°C
AUTO-IGNITION TEMPERATURE	>200°C
SOLUBILITY IN WATER	Water washable

Prolonged exposure to the penetrant can discolour some metals

FF-90 DEVELOPER

APPEARANCE:	Powder dispersed in a solvent blend
COLOUR	White
ODOUR	Solvent
SPECIFIC GRAVITY AT 20°C:	0.781
APPLICATION TEMPERATURE	>10°C
BOILING RANGE (SOLVENT)	40 - 65C
FLASH POINT LIQUID	<0°C
AUTO-IGNITION TEMPERATURE	>200°C
SOLUBILITY IN WATER	Not soluble

(All values apply to product without aerosol propellant)

HEALTH AND SAFETY

A separate Safety Data Sheet (SDS) is available from <https://www.actioncan.com/product/ff-90/> or from info.uk@crcind.com

STORAGE & SHELF LIFE

The product may be stored at normal ambient temperatures and has a shelf life of not less than 6 years with correct storage. Aerosols should always be stored below 50°C, away from direct heat and naked flame.

MISREPRESENTATION ACT 1967 & TRADE DESCRIPTIONS ACT 1968

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TECHNICAL SERVICE

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