

BYCOTEST® D30A, D30plus



Solvent-based Developers

BYCOTEST® D30A and D30plus are non-aqueous developers that provide maximum sensitivity through their solvent action on the penetrant at the site of any defects. They are supplied as a ready-to-use suspension of white developing particles in a fast-drying solvent. This produces an opaque white coating which makes an excellent contrasting background for penetrant indications.

Both developers are low in sulphur and halogens and contain no chlorinated hydrocarbons.

Typical Properties (not a specification)

Property	D30A	D30plus	
Form and colour	White suspension	White suspension	
Odour	Alcoholic	Alcoholic	
Composition	A blend of inert inorganic particles suspended in a solvent blend based on ethanol.	A blend of inert inorganic particles suspended in a solvent blend based on isopropanol and acetone.	
Flash point	Bulk: 12°C Aerosol: -40°C	Bulk: -6°C Aerosol: -40°C	
Density	0.94 g/cm ³	0.88 g/cm ³	
Sulphur content	< 200 ppm	< 200 ppm	
Halogen content	< 200 ppm	< 200 ppm	
Storage temperature	10°C to 30°C	10°C to 30°C	
Usage temperature	-5°C to 50°C	-5°C to 50°C	
Coverage	10 - 15m² per 400ml aerosol, 20 - 30m² per litre	10 - 15m² per 400ml aerosol, 20 - 30m² per litre	

Like all Magnaflux materials, our developers are closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

General Method of Use

Before using any developer, ensure the test surface is clean, free from excess penetrant, and dry. Residue from water-washable penetrants can be removed with a water spray; solvent-removable penetrants by wiping with a solvent cleaner such as C5 or C10.

Use as soon as possible after mixing. If left to stand, the developer particles will settle out of suspension and must be re-suspended before use.

- Apply by spraying only (dipping or brushing will cause excessive solvent action) by aerosol or conventional spray gun.
- Spray in thin even layers which just wet the surface. Too wet a spray will cause excessive bleeding and running of indications; too dry a spray will result in slow indication development, as well as possible loss in overall sensitivity.

With red penetrants, cracks will appear as red lines and porosity as spots. If you see a general reddish colour or pink film, that means the penetrant was not completely removed.

Post-inspection cleaning

After inspection, developer residue can be removed by wiping with a cloth, or by a water and detergent wash.



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The diagram below shows the sequence of operations for the solvent wipe and water-washable red penetrant process.

Solvent wipe method

Apply penetrant to the clean component and allow contact time.

Wipe off penetrant with a rag dampened with a solvent cleaner, e.g. C5, C10, C15.



Apply developer to the component and inspect.

Water wash method

Apply penetrant to the clean component and allow contact time.



Spray component with water to remove excess penetrant.



Dry component, apply developer and inspect.

Recommended Products

Product type	Product Name(s)	
Cleaners/removers	C5, C10 and C15	
Red penetrants	RP20 and RP20LT	

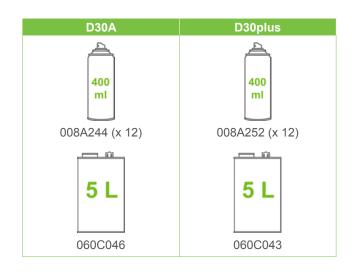
Specification Compliance

Specification	D30A	D30plus
ASME B & PV Code, Sec V	✓	✓
EN ISO 3452-2	✓	✓

Health and Safety

Read the relevant Safety Data Sheet for this product before use. Safety Data Sheets are available on request from your Magnaflux distributor or via the Magnaflux website:

www.eu.magnaflux.com
Availability and Part Numbers







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