

Met-L-Chek®

Penetrant Professor Approved

Product Data Sheet D-72A Dry Powder Developer

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10/2015



Met-L-Chek Company manufactures a complete line of developers used in the fluorescent (**Type 1**) and visible (**Type 2**) dye penetrant inspection process. All Met-L-Chek Company developers are qualified to **AMS-2644** and are sold under the **Met-L-Chek®** and **Pen-Chek®** trademarks. Met-L-Chek Company products are manufactured under license in The Netherlands by NDT Europa.

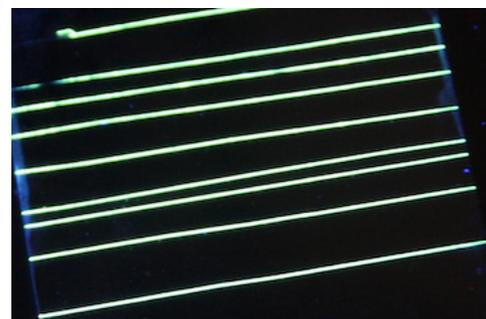
The use of a developer is required by most penetrant inspection specifications. The developer draws the penetrant from the flaw and creates a uniform surface on which to view the penetrant indication. **D-72A** is used with fluorescent penetrants as form “a” developer per **AMS-2644** and **ASTM E-1417**. It is applied after the surface penetrant has been removed and the inspection surface dried. **D-72A** dry powder developer consists of light fluffy absorbent, low toxicity powders. The particles are very light and will float in the air and are considered a nuisance dust. This form of developer is generally applied in special storm or dust chamber equipment, but may also be dusted on to parts with a feather duster, or electrostatic spray. If sprayed avoid build up of a heavy developer film. A very fine dusting is the recommended coverage. The developer film is easily removed from the part surface with water after inspection.

D-72A is approved by Boeing, GE, Pratt & Whitney, SNECMA, and **ISO- 3452**. It is low in Sulfur, Sodium, Chlorine, Fluorine and other Halogens, making it safe for use on Titanium and high Nickel alloys found in aerospace, medical and nuclear components.

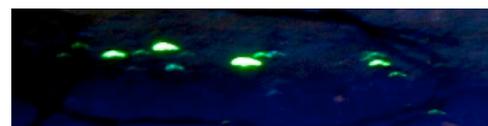
D-72A has been demonstrated to work with red (**Type 2**) dye penetrants on rough castings for gross defect detection when applied by electrostatic spray, but this method is not addressed by current specifications.



D-72A powder



Fluorescent penetrant indications with D-72A





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Typical Physical Properties

Form: white fluffy powder
 Density: 160 g/L
 Flash Point: none
 Fluorescence: none
 Coating: light dusty
 Removability with water: complete
 Corrosion of aluminum: none
 Corrosion of carbon steel: none
 Corrosion of magnesium: none
 Corrosion of stainless steel: none
 Corrosion of titanium: none
 Chloride content: < 100 ppm (0.01%)
 Fluoride content: < 50 ppm (0.005%)
 Sodium content: < 100 ppm (0.01%)
 Sulfur content: < 200 ppm (0.02%)
 Mercury: none
 VOC's: 0 g/L
 Ozone layer depleting substances: none
 PCB's: none

The warranty shelf life of the product is 5 years from date of batch approval.

Specifications

AMS-2644	AMS-2647
ASME B & PV code sec V	
ASTM E-165	ASTM E-1417
ISO-3452	PMC-4356
R-R CSS-232	R-R Omat #606C
Snecma DMC0010 rev J, sensibilité S2, S3, S4	

Product Availability

10 lb.(4.5K) box
 25 lb.(11.3K) box
 1 pint can (0.4L) with dauber 6.5g(2.2oz)

NSN #'s

10 lb 6850-01-264-8682



GHS Information

Warning

GHS: Hazard Statements:

H303: May be harmful if swallowed
H333: May be harmful if inhaled

GHS Precautionary Statements:

P102: Keep out of reach of children.
P233: Keep container tightly closed.
P261: Avoid breathing dust, fumes/gas/mist/vapors/spray.
P280: Wear protective glove/clothing/eye protection/face protection.
P284: In case of inadequate ventilation wear respiratory protection.



GHS Response Statements:

IF INHALED: Remove person to fresh air and keep comfortable for breathing, get medical advice/attention if you feel unwell.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs, get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easily to do. Continue rinsing, get medical attention.
IF SWALLOWED: Rinse mouth, Do Not induce vomiting, get medical attention if feeling unwell.
IF ON CLOTHING: Take off contaminated clothing and wash before reuse.

Transport:

DOT - not regulated
 IATA- not regulated
 IMDG- not regulated

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