

TASETO Chemical Products

TASETO KEIKO CHECK

(Fluorescent Penetrant / Inspection Materials)

Product List

Types	Symbols	Characteristics	Applications
Water washable penetrant	AW-4	Standard type	General testing
	N-21P	Hydrophobic type	For smooth surface
	N-15P	Water based type	For low-precision inspection
High sensitivity water washable penetrant	N-3PA	High fluorescent brightness. Inspection possible without developer.	General testing
	N-3P	Higher sensitivity than N-3PA.	Precision testing
	N-4P	Higher sensitivity than N-3P.	High-precision testing
	N-5P	Higher sensitivity than N-4P	Ultra-high precision testing
Low halogens, low sulfur (water washable penetrant)	GW-U	Same as N-3P. Very low contents of impurities S 10 ppm F 30 ppm Cl 100 ppm	For nuclear power equipment
Post emulsifiable penetrant	AP-5 AP-6	Used with AE-56. Testing of precision materials. Used with AE-56. Suitable for testing fine hair cracks.	Ultra-high precision testing
Emulsifier	AE-56	Used with AP-5 or AP-6.	For post emulsifiable fluorescent Penetrant
Solvent removable penetrant	AP-5 AP-6	Used with the Remover (COLOR CHECK FR-S or FR-Q)	Precision testing Ultra Precision testing
Non-aqueous wet developer	ADS-456	Large suction force of penetrant Quick drying.	Spot testing of large size parts.
Dry developer	ADD-456	Made of white fine dry powder.	For detecting very fine flaws.

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Wet developer (aqueous)	ADW-456	Used by dispersing white fine powder in water.	Used with the penetrant testing equipment.
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TASETO Chemical Products

TASETO KEIKO CHECK

(Fluorescent Penetrant Inspection Materials)
(How to Use)

TASETO KEIKO CHECK, the fluorescent penetrant inspection material, detects any minute defects or through flaws accurately.

TASETO KEIKO Black Light (ultraviolet lamp) is recommended to use together.

Three type of TASETO KEIKO CHECK, water washable, post emulsifiable and solvent removable fluorescent types, are available.

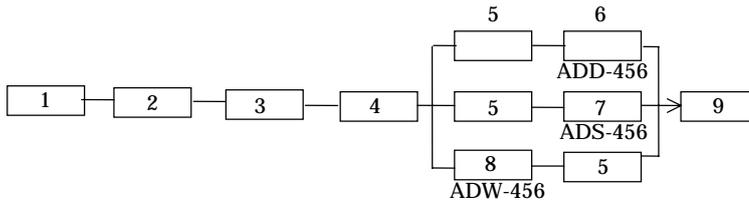
The developer includes non aqueous wet, dry and wet types, and each has its own advantages.

Applications

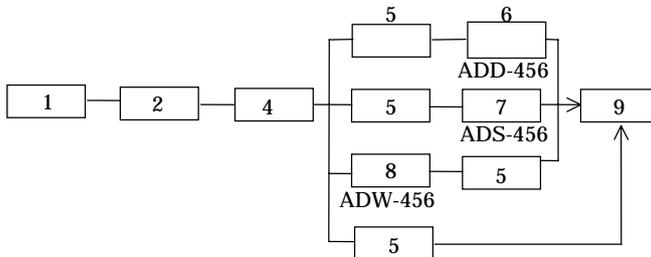
- Ferrous materials : surface flaws in castings, forgings, welds, rolled products (plates, bars, pipes)
- Nonferrous materials : surface flaws in plastics, ceramics, glass.

How to Use

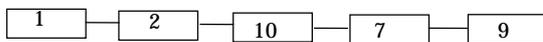
Post emulsifiable fluorescent penetrant testing method



Water washable fluorescent penetrant testing method



Solvent removable fluorescent penetrant testing method



Key:

- | | |
|-------------------------|-----------------------------------|
| 1. Pre-cleaning | 6. Dry-type development |
| 2. Penetration | 7. Non-aqueous wet development |
| 3. Emulsification | 8. Wet development |
| 4. Rinsing (with water) | 9. Inspection |
| 5. Drying | 10. Removal(with solvent remover) |

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TASETO KEIKO CHECK
 (Water Washable Type)

Applications

Mass-produced small parts, threads, keyways and other acute corners, rough surfaces.

Features

1. Good fluorescent brightness and flaw detectability.
2. Usable with a variety of developers, thus widening the range of applications.
3. N-series fluorescent penetrants have self-developing action. Developers are not needed, however, the use of a developer enhances the flaw detectability.
4. N-21P fluorescent penetrant is optimum for decreasing the drainage cost.
5. GW-U fluorescent penetrant use pure, impurity-free constituents. Its fluorescent brightness is equal to that of N-3P product.

Product symbols

Types	Symbols	Characteristics
Water washable fluorescent penetrant	AW-4 N-21P N-15P	Good penetration and water washability. General testing. Hydrophobic penetrant. Easy drainage. Suitable for testing surface roughness of maximum 70S. Water based, suitable for testing flaw on rough surface.
High sensitivity water washable fluorescent penetrant	N-3PA N-3P N-4P N-5P	High fluorescent brightness. Inspection possible without using developer. Higher flaw detection sensitivity than N-3P. Higher fluorescent brightness than N-3P and highly sensitive. Higher fluorescent brightness than N-4P, extremely sensitive. Most suitable for testing hair cracks.
Low halogens, low sulfur type (water washable)	GW-U	For nuclear power equipments. Sensitivity is same as N-3P. Very low contents of impurities. S 10 ppm, F 30 ppm, Cl 100 ppm

Packing units

420 mL aerosol (N-3P)
 4-L can, 18-L can or 200-L drum

TASETO Chemical Products

TASETO KEIKO CHECK

(Post Emulsifiable Fluorescent Penetrant and Emulsifier)

(Solvent Removable Fluorescent Penetrant)

Applications

Testing of very narrow cracks, such as fatigue cracks or grinding cracks.

Features

1. Good fluorescent brightness : optimal for testing fine and shallow flaws.
2. The surface roughness of up to 6S can be tested.
3. Usable with a variety of developers, thus widening the range of applications
4. Suitable for the spot solvent removable fluorescent penetrant testing.

Product symbols

Types	Symbols	Characteristics
Post emulsifiable penetrant	AP-5	Used with AE-56
	AP-6	Used with AE-56 Suitable for testing fine hair cracks.
Emulsifier	AE-56	Used with AP-5, AP-6.
Solvent removable penetrant	AP-5 AP-6	Used with the remover (Color CHECK FR-S or FR-Q).

Packing units

420 mL aerosol can (AP-6)

4-L can, 18-L can or 200-L drum

TASETO Chemical Products
TASETO KEIKO CHECK
(Developers)

Applications

Water washable fluorescent penetrant testing
Post emulsifiable fluorescent penetrant testing
Solvent removable fluorescent penetrant testing

Features

1. Each type of the developer is made of white powder and forms a thin film over the test surface.
2. The developer serves to siphon the fluorescent penetrant entrapped in a flaw by utilizing capillary attraction of clearances in developer grains and enlarge the flaw.
3. In ADS-456 quick drying developer, fine white powder is dispersed in volatile organic solvent. ADS-456 is used by spraying.
4. ADD-456 consists of very light, small white powder. ADD-456 is used by burying a test object or air flying.
5. ADW-456 is used by immersing or spraying over the test surface after it is diluted in water (60 g/liter).

Product symbols

Types	Symbols	Characteristics
Non-aqueous wet developer	ADS-456	Large suction force of penetrant. Quick drying.
Dry developer	ADD-456	Made of white fine dry powder.
Wet developer	ADW-456	Used by dispersing white fine powder in water.

Packing units

ADS-456 : 4L can, 18-L can or 420 mL aerosol can
ADD-456 : 1-kg can
ADW-456 : 5-kg can