

# Flaw Guide NDT Products

## (Manufactured By Pradeep Group of Industries)

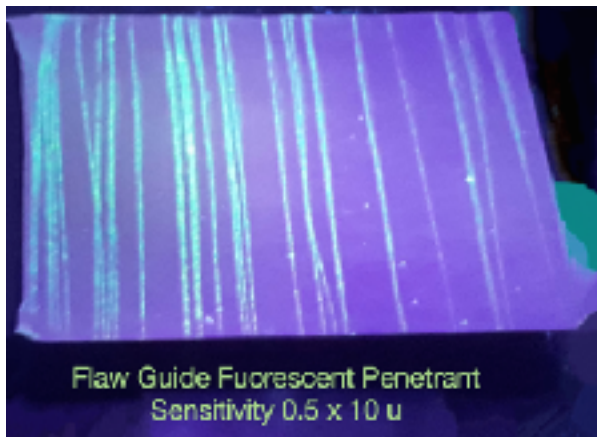
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### Product Info Sheet

## Flaw-Guide Fluorescent Penetrant Systems

Fluorescent Penetrant system is globally popular and most widely used method for detection of extremely fine surface defects in castings, forgings, turbine components, the rough as well as machined components in all kinds of ferrous, non ferrous metals as well as on non porous ceramic materials and for all components for general applications. These types of Penetrant are used to find extremely fine cracks, laps, porosity etc. in all type of aluminium and other Dye Castings used in automotive industries most economically. The Fluorescent Penetrants have bright Yellow Green fluorescence and has high flash point and can be used in open tanks by dipping process. These Penetrants are most suitable for automation of testing of small and large, rough and smooth, threaded or grooved components with holes etc. so as to get high productivity.



Flaw Guide Fluorescent Penetrants are Bio Degradable and operator as well as environment friendly, non corrosive, easy to use with all the desired properties as per requirements of most of the International specifications such as ASME (B&PV) Sec V, ASTM-E-165, AMS 2644, ASTM-1417, EN-571-1, IS 3658/12889 for Liquid Penetrant Testing. Halogen & Sulphur contaminants are controlled well below their acceptable limits. The buyers may select the grades as per their requirements of sensitivity.

This system consists of Water Washable Fluorescent Penetrant, Non Aqueous & Powder Developers and Cleaners for pre Cleaning. These Water Washable Fluorescent Penetrants are supplied in Medium, High & Ultra High Sensitivity as per customer requirements in 20/50/200 ltr. Bulk Packings and also in convenient Aerosol Spray packings for field application.

**Flaw-Guide Fluo Penetrant-W (Water Washable) :** This is water-washable fluorescent penetrants work best on rough surface parts, threaded or grooved parts and those with holes and orifices and most suitable for high rate of production by automation of the process for small components and easy testing of larger parts. They are also used for leak testing and on the parts which are incompatible with oil-based systems.

**Flaw-Guide Penetrant Fluo-GP (Solvent Clean Type):** This is solvent Clean type Fluorescent Penetrant System and largely used for finished and semi finished components with fairly good surface finish. Smooth grinding is done wherever required in order to get satisfactory results. This system is operator dependent and removal of the penetrant after the Dwell time is required to be done very carefully to obtain repetitive and consistent results.

**Flaw-Guide Penetrant Fluo-PE (Post Emulsified) :** Post emulsifiable penetrant system is suitable for examination of critical components where greater sensitivity and reproducibility of test results is desired along with higher productivity, however more procedural controls and processing steps are required in this examination than other penetrant processes. The Penetrant removal after the Dwell time is done by application of Hydrophilic or Lipophilic Emulsifiers and subsequent washing with water. This process is found to be quite suitable for welded, rolled, cast or forged components including non porous ceramics. This system is less suitable for rougher surfaces.

**Flaw-Guide Emulsifier-1010 :** This is hydrophilic Emulsifiers suitable to use with Post Emulsifiable Fluorescent penetrant Fluo PE

**Flaw-Guide Emulsifier-2901 :** This is Lipophilic Emulsifiers suitable to use with Post Emulsifiable Fluorescent penetrant Flaw Guide Fluo PE

**Flaw-Guide Non-Aqueous Developers :** These are ready to use suspensions of extremely fine white inert inorganic powders blended in suitable non halogenated volatile solvents with special additives which provides uniform and excellent white background to obtain highest sensitivity. Solvent suspendible developers are applied by spraying either by using self spraying aerosol cans or by using suitable spray gun with compressed air. The uniform and thin coating gives the best results during inspection.

**Flaw-Guide Powder Developer-P** is bright white, extremely fine, low density free flowing powder most suitable for all types of Water Washable, Solvent Clean type and Post emulsifiable Flaw Guide Fluorescent Penetrants. The powder developer can be applied by dusting, spraying or even by dipping the components in the developer powder

**Flaw-Guide Cleaners :** These are non halogenated solvent & Water base Cleaners suitable for pre cleaning of the job to make it ready for penetrant testing. These cleaners are quite effective to remove oil, grease, loose rust, dirt etc. from the surface of the components so as to help effective penetration of penetrant materials during testing.

**Packings :** The Fluorescent Penetrants & Solvent Base Developers are supplied in 1/5/20/50/200 litre bulk and Convenient Aerosol Packings. Powder Developers are supplied in 1 /5 Kg. packings.