

SPECIALTY PENETRANT MATERIALS



PRODUCT SUMMARY

The products listed on this summary have been specially formulated by Sherwin Incorporated to meet non-routine penetrant application requirements; i.e., when our more general purpose products may be inappropriate. Descriptions of Sherwin Incorporated's more general purpose products are described in other product summaries.

VISIBLE DYE PENETRANTS

DP-50 Dye Penetrant (Water-Washable): Widely accepted for use without developer to find cracks on surfaces of light colored technical ceramics. Has unusual affinity for ceramic surfaces. Also used extensively on metal surfaces, including weldments. Removable by water-spray, water wipe-off and by solvent wipe-off. Not as sensitive as DP-51—a non-specialty—visible dye penetrant for metal surface inspection. Approved Group III under MIL-I-25135-C. Flash point approximately 160°F.

DP-54 DYE PENETRANT (Water-Washable): Approved Type II, Method A and C, MIL-I-25135-E. "Biodegradable." Contains no petroleum distillates and is more likely to be accepted by sewage treatment facilities. Flash point over 200°F, OSHA Class IIIB. Low sulfur and low halogen. Removable by water spray; water wipe-off; or solvent wipe-off. Free rinsing.

DUAL RESPONSE PENETRANT

BY-LUX™ PENETRANT #1: Approved Group III, MIL-I-25135-C. Remove with water. Flaw marks show red on white D-100 Developer background under normal, or "white light," and glow orange under "black light." Provides two levels of sensitivity. Flash point over 200°F. Also may be used with the hydrostatic leak test. (See "Hydrostatic Leak Detection" below.)

WATER-BASE FLUORESCENT PENETRANT

I-319 FLUORESCENT PENETRANT: Water-washable, water-base penetrant. Uses distilled water; no petroleum solvents or distillates. Considered insensitive to liquid oxygen in its diluted state, so-called "LOX-Compatibility." Has good acceptance for use on plastics. Meets most sanitation districts effluent disposal requirements. Not recommended for finding shallow, or wide cracks. Approved Group VI, MIL-I-25135-C.

HIGH TEMPERATURE PENETRANT MATERIALS

KO-17 HI-TEMP® PENETRANT: Visible dye penetrant, approved Groups I and III, MIL-I-25135-C, D & E. Finds flaws on surfaces at elevated temperatures, up to 350°F. Saves time; for weldment inspection before complete cooling (maintain pre-heat temperature); in-service inspection of chemical processing equipment, etc. Used with Hi-Temp KO-19 Remover and either D-100 or Hi-Temp D-350 Developer. ASME Code qualification procedure compliance.

KO-19 HI-TEMP® REMOVER: For use with Hi-Temp KO-17 Penetrant. Approved Group I remover, MIL-I-25135-C, D & E. Use as a wipe-off remover.

D-350 HI-TEMP® DEVELOPER: Nonaqueous. Hi-Temp D350 is used with Hi-Temp KO-17 Penetrant and Hi-Temp KO-19 Remover. White adsorbent particles suspended in nonchlorinated, volatile solvent (alcohol). Available only in spray cans. Performs on elevated temperature surfaces; 200°F to 350°F. Approved Group I and III under MIL-I-25135-C.

FOAM REMOVER

KO-19 FOAM REMOVER: Used for removal of both Type I and II penetrants when shallow, wide cracks are suspected. Foam — similar to shaving lather — is emitted from the KO-19 spray can directly on the penetrant treated surface. Foam lifts penetrant from the surface, but not from the cracks. Dry toweling is used to wipe surface clean.

(OVER)

revised July 2002

SHERWIN
INCORPORATED

5530 Borwick Ave.
South Gate, CA 90280
(562) 861-6324
FAX (562) 923-8370

FOAM REMOVER

KO-19 FOAM REMOVER: Used for removal of both Type I and II penetrants when shallow, wide cracks are suspected. Foam — similar to shaving lather — is emitted from the KO-19 spray can directly on the penetrant treated surface. Foam lifts penetrant from the surface, but not from the cracks. Dry toweling is used to wipe surface clean.

HYDROSTATIC LEAK DETECTION

A-416 FLUORESCENT ADDITIVE: Additive for hydrostatic leak testing; provides fluorescent color to the water. When wet, water fluoresces blue; after drying, water fluoresces yellow. A-416 also lowers surface tension and increases water's penetration capability. (A-416 does not contain corrosion inhibiting agents.) Requires "black light" and semi-darkened conditions.

BY-LUX™ PENETRANT #1: By-Lux™ Penetrant is essentially a colorless liquid that turns bright red in contact with water. In hydrostatic leak testing, By-Lux™ enhances leak visibility. By-Lux™ is applied to the seams of the vessel after it is charged with water. By-Lux™ turns bright red where there are even only traces of water seepage.

HOT TANK CLEANER

LA-1 CLEAR CLEANER®: An aqueous cleaner. Use it to replace solvent-based pre-cleaners in the penetrant process and for general cleaning where solvent cleaners might otherwise be used.

PRECAUTIONARY INFORMATION

Materials described on this Product Summary should be used in accordance with instructions. Use with adequate ventilation and away from sparks, fire and open flame. Avoid contact with skin. Avoid breathing vapors or spray mist. Do not get in eyes. Do not take internally.

The products listed are for industrial use by qualified personnel only. Like all nondestructive testing methods, the penetrant process has limitations and no penetrant manufacturer claims that the use of these materials will show all dangerous cracks or defects under all conditions.

LIMITED WARRANTY

Buyer agrees that if the product proves to be defective, manufacturer's and seller's only obligation shall be to replace or refund the purchase price of such product.