TECHNICAL INFORMATION

Ardrox® 9D75

Water Soluble Developer

PRIMARY APPLICATION

Ardrox® 9D75 is a Form b water soluble developer. It is a free flowing, chromate-free white powder. When dissolved in water at the recommended concentration, it is an effective developer for Type I (fluorescent) dye penetrants.

Ardrox® 9D75 produces a uniform white porous film when dried which is easily removed from the part in post cleaning by a water spray rinse. Once the develoer bath has been made up, no agitation is necessary since Ardrox® 9D75 forms a stable, completely water-soluble solution.

CHEMICAL CHARACTERISTICS

Physical Form	White granular powder
Bulk Density	33 lbs./cu.ft.
Solution Appearance	Clear liquid
Corrosion	Non-corrosive
Bath pH	11.8 <u>+</u> 0.5
Sulfur Content	< 500 ppm
Chloride Content	< 500 ppm

APPROVALS

AMS 2644

APPLICATION PROCEDURE

Note: Do not use Ardrox® 9D75 with the Ardrox® P7F series of fluorescent penetrants.

Ardrox[®] **9D75** is mixed with water at a concentration range of 1 to 2 pounds per gallon. The concentration is determined by using a hydrometer and measuring the specific gravity of the bath. Refer to the Concentration Table below.

Ardrox® 9D75 application methods include spray, immersion, or flow-on. If using immersion, take care to not contaminate the developer bath with the penetrant. For best results, ensure minimal contact time between the developer and the part.

When using spray applications, avoid using excessive pressure because excessive pressure will produce foam and form irregular coatings, which affect sensitivity.

For best results, use forced air drying at 140°F to 160°F (60° to 71°C) after applying the developer. The dried developer forms a porous white film. After drying, wait 7 to 10 minutes before inspecting the part.

As an alternative to drying parts with heated forced air, immerse the parts in a heated (145° to 155°F or 63° to 69°C) solution bath of Ardrox® 9D75. Use the same bath concentration as an ambient temperature bath.





ALBERTA

MIXING INSTRUCTIONS

Fill the immersion tank with the appropriate amount of water. Heated water (120°F (49°C)) dissolves Ardrox® 9D75 powder faster than cooler water. Slowly mix in the specified amount of Ardrox® 9D75 powder and stir until completely dissolve. Check the concentration and adjust accordingly. Lower end concentrations may result in poor coverage on some metal surfaces. If de-wetting occurs, increase the concentration or change the bath. Excessively high concentrations can create thick developer films which may blur fine indications.

CONCENTRATION TABLE

To determine the correct amount of Ardrox® 9D75 to add to the immersion bath, use a hydrometer and determine the specific gravity of the solution. Compare level to the table below and make necessary additions.

	Hydrometer: 1.000 to 1.220
Pounds per gallon	Specific Gravity at 70°F (21°C)
0.50	1.022
0.75	1.032
1.00	1.040
1.25	1.048
1.50	1.058
1.75	1.064
2.00	1.077
2.25	1.085

EFFECTS ON MATERIALS

Use stainless steel tanks for the immersion developer tanks.

SAFETY AND HANDLING

Prior to handling and use of any of the materials referenced in this document, the Material Safety Data Sheets should be read and understood by all personnel in contact with these materials.

KEEP OUT OF REACH OF CHILDREN

STORAGE

Dry indoor storage at temperatures between 40°F and 100°F is recommended, away from any incompatible materials referenced in the Material Safety Data Sheets. All containers should be tightly closed when not in use.

SHELF LIFE

The shelf life is 3 years.

DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, and local regulations. The process solution can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.



QUEBEC

450-691-9090 info@gnde.ca

ONTARIO

Mercier, QC J6R 2C2 Cambridge, ON N1T 1A3 519-894-9069 nadams@gnde.ca

ALBERTA

164, St-Jean-Baptiste 275, Sheldon Drive, Unit 3 7307, 50 street NW Edmonton, AB T6B 2J9 587-689-6811 lfields@qnde.ca

