



MR®-System "Hot"

for temperatures between +30 °C and +200°C for penetrant testing according to EN ISO 571-1

General appearance and composition:

MR®-System "Hot" consists of:

- MR[®] 68 H Penetrant red, system "hot" solvent removable penetrant red without AZO-dye-stuff
- MR® 91 H Remover, system "hot" special remover for "Hot"-testing mixture of hydrocarbons with special additives
- MR® 70 H Developer white, system "hot" special developer for "Hot"-testing hydrocarbon based carrier medium with special, modified solid components
- The system is suitable for work piece temperatures between +30 °C and +200°C

Relevant approvals and specifications:

- Sample testing acc. to EN ISO 3452: 2006 part 2
- Sensitivity class 2 acc. to DIN EN ISO 3452:2009 part 5 System IIICe
 - Penetrant: $MR^{\text{@}}$ 68 H, Remover: $MR^{\text{@}}$ 91 H, Developer: $MR^{\text{@}}$ 70
- Low content of halogens and sulphur according to DIN EN ISO 3452:2006 part 2 and ASME Code V, Section V, Article 6, T-641

Application:

- Check work piece temperature, e.g. by using our Infrared-Thermometer HP-880EK.
- Remove tinder, rust and other contaminations from surface in a suitable manner.
- Apply MR[®] 68 H Penetrant red to the part to be tested either by spraying or brushing.
 Approximate values for penetration time: > 30 °C 180 s, > 100 °C 60 s, 150 °C 30-40 s
- Remove access penetrant from surface with a lint-free cloth wich is soaked in MR[®] 91 H Remover.
- Spray MR[®] 70 H Developer white, system "hot" from a distance of approx. 20 cm on the dry surface, achieving a thin, uniform layer. Discontinuities will appear as red indications. Please note: If the developer layer is too thick tiny discontinuities will not appear through the developer.

Safety precautions:

On use in higher temperature ranges, the risks associated with this should be adequately
considered. Burns to the skin and vapour build up of substances may mean corresponding
dangers. The work area must always be suitably ventilated and personnel exposure carefully
assessed.

Minimum durability:

• will keep for a minimum of 4 years, stored at room temperature

Pack sizes:

- MR® 68 H Penetrant red, system "hot": aerosols, 500 ml (1 box contains 12 aerosols), 1 L, 5 L
- MR® 91 H Remover, system "hot": aerosols, 500 ml (1 box contains 12 aerosols), 5 L
- MR® 70 H Developer white, system "hot": aerosols, 500 ml (1 box contains 12 aerosols), 1 L, 5 L

09.07.2012/db

Please visit our website www.mr-chemie.de

