



# Penetrant Testing

Product information  
MR<sup>®</sup> 311-R Penetrant red



## MR<sup>®</sup> 311-R Penetrant red

for penetrant testing according to EN ISO 3452-1:2013

### General appearance and composition:

- Water and solvent removable penetrant red, type II acc. to EN ISO 3452-1:2013
- Dark red colour
- Free of mineral oil
- Free of AZO
- Very good biodegradability acc. to EN ISO 9888
- Suitable for all metals (suitability for plastics and ceramics needs testing prior to use)
- Testing security is guaranteed at work piece temperatures between +10 °C and +50 °C
- Good removing from skin
- Very good washability
- Aerosol overhead sprayable

### Relevant approvals and specifications

- Sample testing acc. to EN ISO 3452-2:2006
- Sensitivity class 2 acc. to EN ISO 3452-2:2006 system IICe
  - Remover: MR<sup>®</sup> 79, MR<sup>®</sup> 85, MR<sup>®</sup> 88
  - Developer: MR<sup>®</sup> 70
- Sensitivity class 1 acc. to EN ISO 3452-2:2006 system IIAc
  - Remover: Water
  - Developer: MR<sup>®</sup> 703 W
- Sensitivity class 2 acc. to EN ISO 3452-2:2006 system IIAe
  - Remover: Water
  - Developer: MR<sup>®</sup> 70
- Low content of halogens and sulphur according to EN ISO 3452-2:2006 and ASME Code V, Section V, Article 6, T-641
- Produits et Matériaux Utilisables en Centrales (PMUC)



### Application:

- Remove tinder, rust and other contaminations from surface in a suitable manner. A possible precleaner for removal of oils or fats is e.g. our remover MR<sup>®</sup> 79.
- Apply MR<sup>®</sup> 311-R Penetrant red to the part to be tested either by spraying, brushing, flooding or dipping. Allow to penetrate for at least 5 minutes.
- Remove excess penetrant from surface either using water or a clean lint-free cloth lightly moistened with an MR<sup>®</sup> Remover.
- Spray MR<sup>®</sup> 70 Developer or MR<sup>®</sup> 703 W Developer from a distance of approx. 20 cm on the dry surface, achieving a thin, uniform layer. Surface defects will appear as red indications. Please note: If the developer layer is too thick tiny discontinuities will not appear through the developer.



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## Minimum shelf life:

- Will keep for a minimum of 4 years, stored at room temperature

## Pack sizes:

- Aerosols, 500 ml (1 box contains 12 aerosols)
- 5 L, 30 L, 200 L