

INM - Instituto Nacional de Metrología

Density

Calibration and Measurement Capability (CMC)

| Calibration or Measurement Service | | | Measurand Level or Range | | | Expanded Uncertainty | | | | | Reference Standard used in calibration | |
|------------------------------------|------------------------|-------------------------------------|--------------------------|---------------|-------------------|----------------------|-------|-----------------|---------------------|---|--|------------------------|
| Quantity/ Class | Instrument or Artifact | Instrument Type or Method | Minimum value | Maximum value | Units | Value | Units | Coverage Factor | Level of Confidence | Is the expanded uncertainty a relative one? | Standard | Source of traceability |
| Density of liquids | Hydrometers | Cuckow Method, Weighing hydrostatic | 0,6 | 2 | g/cm ³ | 1x10 ⁻⁴ | | 2 | 95% | SI | n-Nonane | PTB |
| Density of liquids | Liquid | Arquimedes Principle | 0.6 | 2 | g/cm ³ | 6x10 ⁻⁵ | | 2 | 95% | SI | Volume cylinders 145 cm ³ and 146 cm ³ | PTB |
| Density of solids | Solid | Arquimedes Principle | 1 | 25 | g/cm ³ | 1x10 ⁻⁴ | | 2 | 95% | SI | Bidistilled Water or Water Type I | ITS-90 |
| Volume of solid | Solid | Gravimetric method | 1 | | cm ³ | 6x10 ⁻⁵ | | 2 | 95% | SI | Bidistilled Water or Water Type I | ITS-90 |

NOTA: Para los servicios de densidad y volumen de sólidos, el servicio se realiza para sólidos con masa menor a un kg

Last updated November 06, 2015