

# IODINE-131 (<sup>131</sup>I)

Isotope : I-131 (2311)

Property : I-131 in 0.3 M NaOH

## SPECIFICATIONS

Appearance of the solution	Clear, colourless solution
Radionuclidic identity	Gamma Rays at 0.284, 0.365 and 0.637 MeV
Radiochemical identity	$RT_{Std}/RT_{I-131} = 0.95 - 1.05$
pH	Strongly alkaline (pH > 10)
Radionuclidic purity	
<sup>131</sup> I	≥ 99.9 %
<sup>133</sup> I + <sup>135</sup> I + other	≤ 0.1 %
Radiochemical purity <sup>(1)</sup>	
<sup>131</sup> I Iodide	≥ 97 %
<sup>131</sup> I Iodate + Periodate	≤ 3 %
Specific activity	≥ 555 GBq/mg
Radioactive concentration	≥ 160.2 GBq/ml at IRE QC calibration date <sup>(2)</sup> ≥ 37 GBq/mL at expiry date <sup>(3)</sup>

<sup>(1)</sup> Radiochemical purity is guaranteed for dispensed activity ≥ 2.7 Ci at calibration day.

<sup>(2)</sup> IRE QC calibration date 12.00 (noon) CET = first day from which I-131 can be dispensed (11 days after I-131 trapping).

<sup>(3)</sup> Expiry date = last day 12.00 (noon) CET at which I-131 can be used (17 days after IRE QC calibration date).