

# Plastic Water<sup>®</sup>

Calibrate photon and electron beams within 0.5% of true water dose

Unlike other water equivalent plastics on the market, Plastic Water<sup>®</sup> is flexible and will not break under impact. Plastic Water<sup>®</sup> is the only calibration material available in 1 mm thicknesses. Plastic Water<sup>®</sup> is the only material which agrees with true water within 0.5% above 7 MeV.

Custom cavities are available to accommodate any ion chamber on the market (simply provide detailed drawings when ordering).

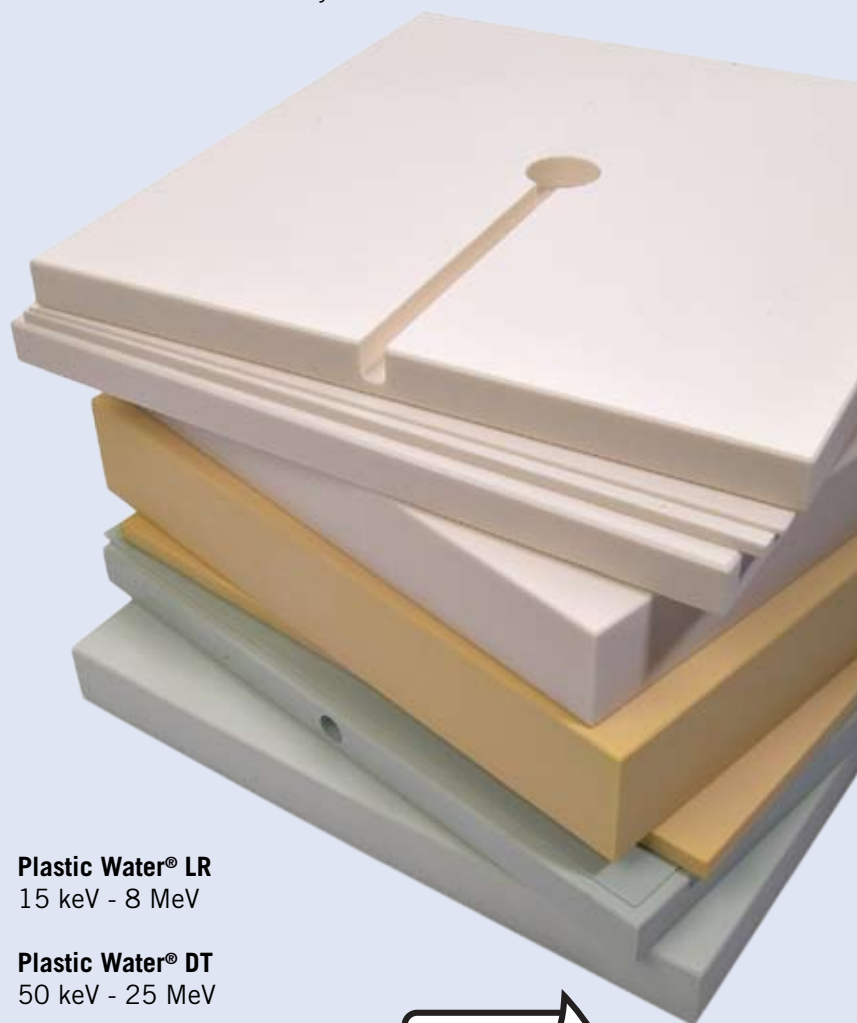
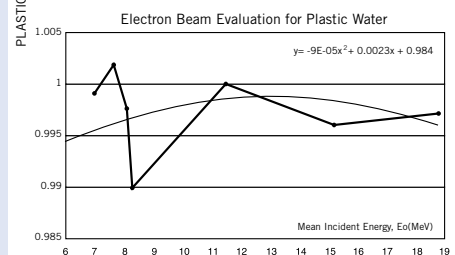
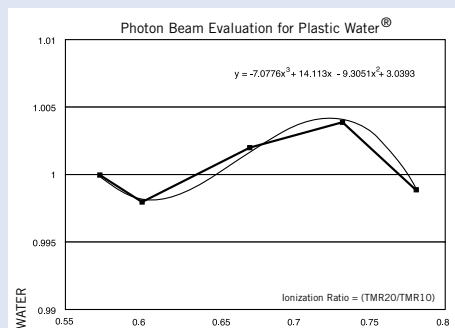
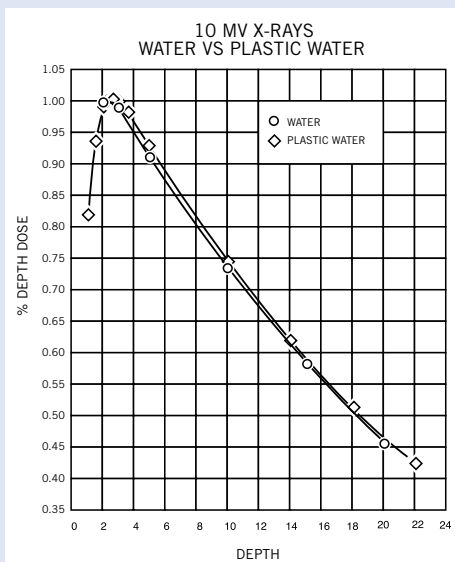
CIRS can simulate any tissue found in the human body and many phantoms contain multiple tissue substitutes. Water, however, is the most important reference material in Medical Physics. To accurately simulate water over all energy from 10 keV to 100 MeV with a singular solid materials is one of the more challenging tasks in the field of Tissue Simulation. CIRS water equivalent materials are formulated to mimic within 1% or better for specific energy ranges.

Plastic Water LR is formulated for liquid water equivalency at photon energies and is useful in the evaluation of the dosimetry

of low energy brachytherapy sources. It has been shown to be an excellent water substitute at low energy.

Plastic Water DT is designed to meet the demands of IMRT verification techniques where it is desirable to match attenuation and absorption properties in both the diagnostic and therapy energy ranges.

All plastic water formulations exhibit excellent durability and mechanical properties and are easily machined.



**Plastic Water<sup>®</sup> LR**  
15 keV - 8 MeV

**Plastic Water<sup>®</sup> DT**  
50 keV - 25 MeV

**Plastic Water<sup>®</sup> (The Original)**  
150 keV - 100 MeV

