



Tissue Equivalent Materials

BARTS TISSUE EQUIVALENT MATERIALS

The original tissue equivalent materials from Barts.

Suitable for both kV and MV energies.

Available in many sizes and shapes, including molded or machined cavities to house dosimeters.

Please contact us for more details and pricing.

Composition, density and electron density shown overleaf for;

- Barts Water (WT1)
- Adipose (AP7)
- Breast (BR12)
- Hard Cortical Bone (SB5)
- Inner Bone (IB7)
- Rib or Average bone (RB2)
- Lung (LN10)
- Soft Tissue (ST1)
- Kidney (KD1)
- Liver (LV1)



For more information or to find your regional distributor please visit our website



Tissue Equivalent Materials

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Elemental composition (by mass) and density.

Water Equivalent (WT1).

H	C	N	O	Cl	Ca	Density	*Electron Density(m-3x10 ²⁶)
8.41%	67.97%	2.27%	18.87%	0.13%	2.35%	1.00g/cm ³	3310

Adipose (AP7).

H	C	N	O	Cl	F	Density	*Electron Density(m-3x10 ²⁶)
8.36%	69.14%	2.36%	16.93%	0.14%	3.07%	0.92g/cm ³	2990

Breast (BR12).

H	C	N	O	Cl	Ca	Density	*Electron Density(m-3x10 ²⁶)
8.68%	69.95%	2.36%	17.91%	0.14%	0.95%	0.97g/cm ³	3170

Hard Cortical Bone (SB5).

H	C	N	O	Cl	Ca	Density	*Electron Density(m-3x10 ²⁶)
2.60%	30.58%	0.98%	38.93%	0.06%	26.85%	1.84g/cm ³	5770

Inner Bone (IB7).

Inner bone represents an average composition of hard bone and red marrow found in spongiosa structures and is based upon the ratio of 22.4% hard bone to 77.6% soft tissue (WT1). Density 1.18g/cm³.

Rib or Average bone (RB2).

Average bone is an average composition inclusive of hard or cortical bone, spongiosa and red marrow in the ratio of 46.5% hard bone to 53.5% soft tissue (WT1). Density 1.40g / cm³

Lung (LN10).

Composition as WT1. Density: 0.25 – 0.35 g/cm³ *Electron Density (m-3x10²⁶) 1000

Soft Tissue (ST), Kidney (KD1) & Liver (LV1).

As WT1.

*As stated in ICRU Report 44