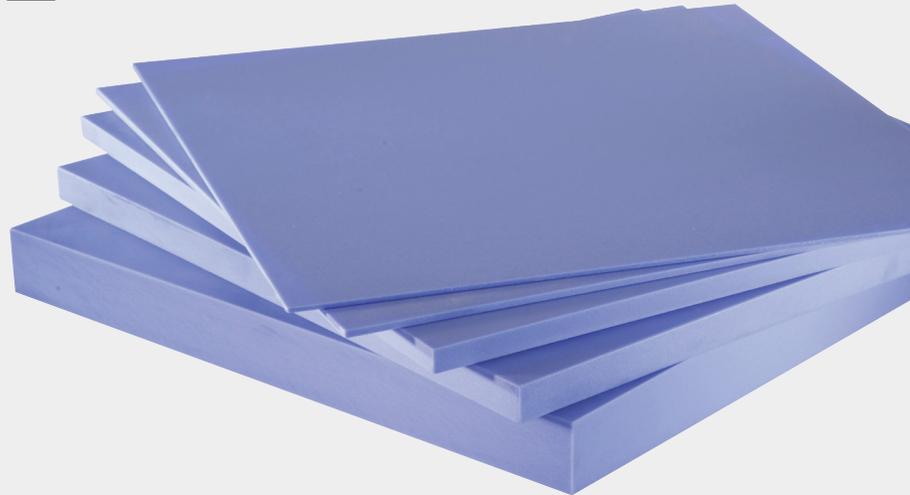


Solid Water[®] HE

Reliable, Durable Water Equivalent Phantoms

- Durable water equivalent phantom for photon and electron energy measurements
- Water equivalence within 0.5% for therapeutic and diagnostic energy ranges



New radiation therapy and diagnostic modalities must be implemented carefully and monitored closely to ensure the results match the expectations. With improved uniformity and durability, Solid Water HE enables precise, accurate and effective Quality Assurance.

Leading Uniformity

- Improved uniformity and reduced variation compared to other water mimicking formulations
- No streaks or stripes for more consistent and accurate results in imaging and therapeutic quality assurance

Leading Durability

- Unique Nanosphere technology offers a combination of high strength and water equivalence
- Increased strength and durability allows manufacturing of slabs as thin as 1.0 mm
- Longer lifespan from increased durability and resistance to scratches and chipping

Leading Versatility

- Supports diagnostic and therapeutic energy ranges
- No need for different stacks of water mimicking materials rated at different energy ranges

Specifications

Depth Ionization Relative-to-water

Photons: 1.000 +/- 0.005

Electrons: 1.000 +/- 0.005

Mass Density (g/cm³): 1.032 +/- 0.005

Electron Density (e⁻/cm³ N_A): 0.557 +/- 0.001

Electron Density Ratio

Solid Water HE / Water: 1.000 +/- 0.005

Dimensions (L/W) Thickness

20 x 20 cm 0.1 cm – 6.0 cm

30 x 30 cm 0.1 cm – 6.0 cm

40 x 40 cm 0.2 cm – 5.0 cm

Tissue Mimicking Materials

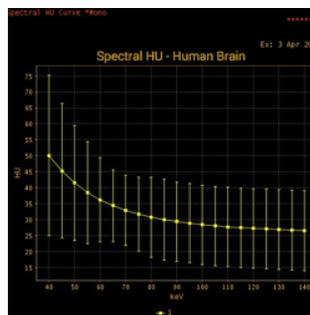
Tissue Mimicking Materials (TMM) play a key role in the dose calculations for Treatment Planning Systems and for absorbed dose estimates in radiographic images studies. Sun Nuclear has a full line of TMM for all of your clinical and research needs.

- Supports a variety of uses including routine quality assurance and quality control in both diagnostic and therapeutic imaging
- Simple, convenient, and accurate simulations for therapy dose determinations
- Excellent simulations for electron and photon applications between 0.01 and 100 MeV

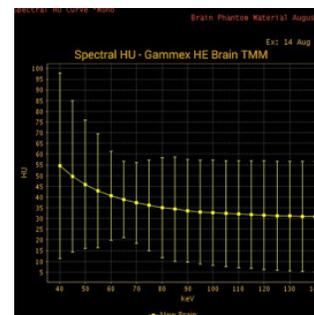
Sun Nuclear offers tissue mimicking materials for:

- Cortical Bone
- Muscle
- Adipose
- Breast
- Lung
- Inner Bone
- Brain
- HE Brain
- Liver

Spectral HU - Human Brain



Spectral HU - Sun Nuclear HE Brain TMM



Example of HE-Brain equivalence across the energy spectrum of diagnostic imaging.

Specifications

Dimensions (L/W) Thickness

20 x 20 cm 0.2 cm – 6.0 cm¹

30 x 30 cm 0.2 cm – 6.0 cm¹

40 x 40 cm 0.2 cm – 5.0 cm¹

1 1.0 cm minimum thickness for the Gammex 455 Lung material



Solid Water® HE Transport & Storage Case

This custom wheeled case is designed to store and/or transport 30 x 30 cm Solid Water HE slabs. The case can hold either 30 cm or 20 cm slab phantom kits. Or create your own set of Solid Water HE slabs. Solid Water HE slabs are sold separately.



Specifications

Dimensions (L/W/H) (in): 31.2 x 20.3 x 15.5

Weight (lbs): Case empty - 28.4
 Case with 30 cm kit and chambered slab - 93.9
 Case with 20 cm kit and chambered slab - 73.4

Type: Watertight hard case with telescoping handle and wheels

Case Capacity

Quantity	Thickness
1	0.1 cm
2	0.2 cm
1	0.5 cm
1	1.0 cm
4	2.0 cm
1	3.0 cm
1	4.0 cm
3	5.0 cm

Optional Solid Water HE Slab Phantom Kits

30 CM Slab Phantom Kit

20 CM Slab Phantom Kit

Quantity	Thickness	Quantity	Thickness
1	0.1 cm	1	0.1 cm
2	0.2 cm	2	0.2 cm
1	0.5 cm	1	0.5 cm
1	1.0 cm	1	1.0 cm
3	2.0 cm	2	2.0 cm
1	3.0 cm	1	4.0 cm
1	4.0 cm	2	5.0 cm
3	5.0 cm	TOTAL	20.0 cm
TOTAL	30.0 cm		



2.0 cm chamber slabs sold separately