References (material database, v4.1, 22.02.2022)

References for the air and fluid properties listed in our database. Values for fluids of which the properties are not available in the literature are substituted with values from other fluids. In these cases, the fluid used for the value is listed instead of a reference. The rational for each individual substitution is provided in the Rational for Tissue Substitutions.

Fluid/Gas	Density	Heat Capacity	Thermal Conductivity	Dynamic Viscosity	Dielectric Properties
Air	engineeringtoolbox.com Montgomery, 1947	engineeringtoolbox.com	engineeringtoolbox.com Montgomery, 1947 Kadoya, 1985	engineeringtoolbox.com Montgomery, 1947 Kadoya, 1985	Not in Database
Blood	See Material Properties References	See Material Properties References	See Material Properties References	Rand et al., 1964 Valant et al., 2011 Lowe, 1987 Walter Seibt, Physik für Mediziner	See Material Properties References
Blood Plasma	See Material Properties References	See Material Properties References	See Material Properties References	Lowe, 1987	Not in Database
Blood Serum	See Material Properties References	Not in Database	Not in Database	Lowe, 1987	Not in Database
Cerebrospinal Fluid	See Material Properties References	See Material Properties References	See Material Properties References	Bloomfield et al., 1998	See Material Properties References
Lymph	See Material Properties References	Not in Database	Not in Database	Bouta et al, 2014	See Material Properties References
Urine	See Material Properties References	See Material Properties References	See Material Properties References	Inman et al., 2013	See Material Properties References
Vitreous Humor	See Material Properties References	See Material Properties References	See Material Properties References	Sharif-Kahani et al., 2011	See Material Properties References
Water	See Material Properties References	See Material Properties References	See Material Properties References	Korson et al., 1969 Parry et al., 2009 engineeringtoolbox.com	Not in Database

Not in Database: Values for that property are not yet included in the fluid properties database.