

Texture class	Data source	Clapp and Hornberger (1978)	Rosetta3	Cosby et al. (1984)	Rawls database	Ahuja database	UNSODA database	US soils K_{sat} data	EU-HYDI database
			(Zhang and Schaap, 2017)		(Schaap and Leij, 1998)			(Pachepsky and Park, 2015)	(Weynants et al., 2013)
		K_{sat} (cm min^{-1})	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm day}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ in h}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm day}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm day}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm day}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm h}^{-1}$)	$\log K_{\text{sat}}$ (SD) ($\log_{10} \text{ cm day}^{-1}$)
Sand	Literature SWIG	1.056 0.704	2.81/0.59 (253) 3.01/3.51 (291)	0.82/0.39 1.22/1.73	2.71/0.51 (97) 3.01/3.51 (291)	3.01/0.45 (82) 3.01/3.51 (291)	2.70/074 (129) 3.01/3.51 (291)	1.57/0.71 (115) 1.63/2.13 (291)	0.71/1.45 (264) 3.01/3.51 (291)
Loamy sand	Literature SWIG	0.938 1.033	2.02/0.64 (167) 3.17/3.63 (92)	0.30/0.51 1.39/1.84	1.91/0.61 (135) 3.17/3.63 (92)	2.09/0.69 (19) 3.17/3.63 (92)	2.36/0.59 (51) 3.17/3.63 (92)	1.03/0.42 (76) 1.79/2.25 (92)	0.80/1.41 (234) 3.17/3.63 (92)
Sandy loam	Literature SWIG	0.208 0.534	1.58/0.67 (315) 2.89/3.36 (500)	-0.13/0.67 1.10/1.58	1.53/0.65 (337) 2.89/3.36 (500)	1.73/0.64 (65) 2.89/3.36 (500)	1.58/0.92 (79) 2.89/3.36 (500)	0.66/0.54 (169) 1.51/1.98 (500)	1.17/1.34 (825) 2.89/3.36 (500)
Silt loam	Literature SWIG	0.043 0.442	1.28/0.74 (130) 2.80/3.17 (409)	-0.4/0.55 1.02/1.39	1.04/0.54 (217) 2.80/3.17 (409)	1.24/0.47 (12) 2.80/3.17 (409)	1.48/0.86 (103) 2.80/3.17 (409)	0.11/0.87 (215) 1.42/1.79 (409)	0.89/1.45 (714) 2.80/3.17 (409)
Loam	Literature SWIG	0.042 0.129	1.09/0.92 (117) 2.27/2.81 (583)	-0.32/0.63 0.49/1.02	0.99/0.63 (137) 2.27/2.81 (583)	0.83/0.95 (50) 2.27/2.81 (583)	1.58/0.92 (62) 2.27/2.81 (583)	0.12/0.79 (81) 0.89/1.43 (583)	1.69/1.76 (411) 2.27/2.81 (583)
Sandy clay loam	Literature SWIG	0.038 0.124	1.14/0.85 (13) 2.25/2.49 (185)	-0.2/0.54 0.47/0.70	1.29/0.71 (104) 2.25/2.49 (185)	0.81/0.80 (36) 2.25/2.49 (185)	0.99/1.21 (41) 2.25/2.49 (185)	0.12/0.94 (139) 0.87/1.11 (185)	0.73/1.45 (128) 2.25/2.49 (185)
Silty clay loam	Literature SWIG	0.010 0.178	1.04/0.74 (46) 2.41/2.77 (250)	-0.54/0.61 0.62/0.98	0.87/0.55 (47) 2.41/2.77 (250)	1.09/0.78 (21) 2.41/2.77 (250)	1.14/0.85 (21) 2.41/2.77 (250)	-0.15/0.75 (83) 1.03/1.39 (250)	0.35/1.50 (364) 2.41/2.77 (250)
Clay loam	Literature SWIG	0.015 0.139	0.87/1.11 (58) 2.30/2.68 (467)	-0.46/0.59 0.52/0.90	0.67/0.58 (77) 2.30/2.68 (467)	0.79/1.08 (48) 2.30/2.68 (467)	1.84/0.89 (25) 2.30/2.68 (467)	-0.03/0.94 (109) 0.92/1.3 (467)	1.10/1.54 (284) 2.30/2.68 (467)
Sandy clay	Literature SWIG	0.013 -	1.06/0.89 (10) -/- (-)	0.01/0.33 -/-	1.33/0.33 (9) -/- (-)	-0.03/1.28 (2) -/- (-)	- (-) -/- (-)	-0.77/1.22 (21) -/- (-)	0.81/1.56 (5) -/- (-)
Silty clay	Literature SWIG	0.006 0.439	0.98/0.58 (14) 2.80/3.17 (121)	-0.72/0.69 1.02/1.39	0.82/0.55 (12) 2.80/3.17 (121)	1.15/0.16 (5) 2.80/3.17 (121)	0.92/0.71 (12) 2.80/3.17 (121)	-0.72/0.95 (22) 1.42/1.79 (121)	0.18/1.32 (349) 2.80/3.17 (121)
Clay	Literature SWIG	0.008 5.906	1.17/0.92 (60) 3.93/4.48 (333)	- 2.15/2.70	0.94/0.31 (34) 3.93/4.48 (333)	1.03/0.83 (31) 3.93/4.48 (333)	1.41/015 (27) 3.93/4.48 (333)	-0.17/0.71 (115) 2.55/3.10 (333)	-0.08/1.41 (737) 3.93/4.48 (333)
Silt	Literature SWIG	- -	1.64/0.27 (3) -/- (-)	- -/-	1.43/- (3) -/- (-)	- (-) -/- (-)	1.75/0.20 (3) -/- (-)	- (-) -/- (-)	-0.29/1.56 (11) -/- (-)