Propiedades Termofísicas FLUIDOS ORGÁNICOS

$$\rho(Temp, A\rho, B\rho, C\rho, D\rho) := \left(A\rho \cdot 10^{3} \cdot B\rho^{-\left(1-\frac{Temp+273.2}{C\rho}\right)^{D\rho}}\right) \cdot \frac{kg}{m^{3}}$$

$$\mu(Temp, A\mu, B\mu, C\mu, D\mu) := 10^{\left(A\mu + \frac{B\mu}{Temp+273.2} + C\mu \cdot (Temp+273.2) + D\mu \cdot (Temp+273.2)^{2}\right)} \cdot 10^{-2} \cdot poise$$

$$cP(Temp, Acp, Bcp, Ccp, Dcp, M) := \left(Acp + Bcp \cdot (Temp+273.2) + Ccp \cdot (Temp+273.2)^{2} + Dcp \cdot (Temp+273.2)^{3}\right) \cdot (M)^{-1} \cdot \frac{J}{kg \cdot \Delta^{\circ}C}$$

$$\kappa(Temp, A\kappa, B\kappa, C\kappa) := \left(10^{\left(A\kappa + B\kappa \cdot \left(1-\frac{Temp+273.2}{C\kappa}\right)^{\frac{2}{7}}\right)}\right) \cdot \frac{W}{m \cdot \Delta^{\circ}C}$$

ETANOL

$$Meth := 46.0684 \cdot 10^{-3}$$

C2H6O 159.05<T(K)<516.25 $Apeth := 0.26570$ $Bpeth := 0.26395$ $Cpeth := 516.25$ $Dpeth := 0.23670$

C2H6O 240<T(K)<516 $A\mu eth := -6.4406$ $B\mu eth := 1.1176 \cdot 10^{3}$ $C\mu eth := 1.3721 \cdot 10^{-2}$ $D\mu eth := -1.5465 \cdot 10^{-5}$

C2H6O 160<T(K)<465 $Acpeth := 59.342$ $Bcpeth := 3.6358 \cdot 10^{-1}$ $Ccpeth := -1.2164 \cdot 10^{-3}$ $Dcpeth := 1.8030 \cdot 10^{-6}$

C2H6O 159<T(K)<490 $A\kappa eth := -1.3172$ $B\kappa eth := 0.6987$ $C\kappa eth := 516.25$

ANILINA

$$Man := 93.126 \cdot 10^{-3}$$

C6H7N 267.13<T(K)<699.0 $Apan := 0.31190$ $Bpan := 0.2500$ $Cpan := 699.00$ $Dpan := 0.28571$

C6H7N 268<T(K)<699 $A\mu an := -13.8625$ $B\mu an := 2.5109 \cdot 10^{3}$ $C\mu an := 2.5681 \cdot 10^{-2}$ $D\mu an := -1.8281 \cdot 10^{-5}$

C6H7N 268<T(K)<629 $Acpan := 63.288$ $Bcpan := 9.8960 \cdot 10^{-1}$ $Ccpan := -2.3583 \cdot 10^{-3}$ $Dcpan := 2.3296 \cdot 10^{-6}$

C6H7N 267<T(K)<664 $A\kappa an := -1.3485$ $B\kappa an := 0.6888$ $C\kappa an := 699.0$

BENCENO

$Mbe := 78.11184 \cdot 10^{-3}$

C6H6	278.68<T(K)<562.16	$A\rho be := 0.30090$	$B\rho be := 0.26770$	$C\rho be := 562.16$	$D\rho be := 0.28180$	
C6H6	285<T(K)<562	$A\mu be := -7.4005$	$B\mu be := 1.1815 \cdot 10^{3}$	$C\mu be := 1.4888 \cdot 10^{-2}$	$D\mu be := -1.3713 \cdot 10^{-5}$	
C6H6	280<T(K)<506	$Acpbe := -31.663$	$Bcpbe := 1.3043$	$Ccpbe := -3.6078 \cdot 10^{-3}$	$Dcpbe := 3.8243 \cdot 10^{-6}$	
C6H6	279<T(K)<534	$A\kappa be := -1.6846$	$B\kappa be := 1.0520$	$C\kappa be := 562.6$		