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Main
compartment: C1_source Unconditional
dC1_source/dt = -F1
Initial Value = 1
compartment: C2_reservoir Unconditional
dC2_reservoir/dt = +F1-F2
Initial Value = 0.0
compartment: C3_reservoir Unconditional
dC3_reservoir/dt = +F2-F3-F4
Initial Value = 0.0
define value: C3max Unconditional Global
C3max = 0.2
compartment: C4_puits Unconditional
dC4_puits/dt = +F3
Initial Value = 0.0
compartment: C5_debordement Unconditional
dC5_debordement/dt = +F4
Initial Value = 0.0
flow: F1 Unconditional
Flow from C1_source to C2_reservoir
 $F1 = (p1 * t / (t + p4)) * C1\_source$ 
flow: F2 Unconditional
Flow from C2_reservoir to C3_reservoir
 $F2 = V1 * C2\_reservoir$ 
flow: F3 Unconditional
Flow from C3_reservoir to C4_puits
 $F3 = p3 * C3\_reservoir$ 
flow: F4 Conditional
Flow from C3_reservoir to C5_debordement
 $F4 =$ 
   $p5 * ( C3\_reservoir - C3max )$  for  $C3\_reservoir >= C3max$ 
  0 by default
variable: V1 Unconditional
 $V1 = p2 * ( 1 + \sin(t/5) )$ 
```