

US EPA ARCHIVE DOCUMENT

APPENDIX A-5

DEFAULT VARIABLES: ABBREVIATIONS, UNITS, AND VALUES

Variable Abbreviation*	Units	Value
U	m/sec	4
$F(X)$	dimensionless	1.33
V_f	dimensionless	0
$k (<=10\mu m)$	dimensionless	0.36
$k (<=30\mu m)$	dimensionless	0.8
s	percent	8
S	km/hr	24
W	tons	15
w	wheels/vehicle	6
N_p	days/year	90
$K_p (<=10mm)$	dimensionless	0.36
$K_p (>= 10mm; <=30mm)$	dimensionless	0.73
DH	m	2
M	percent	1
Yd	m ³	10
F	dimensionless	0.15
a	dimensionless	32.093
b	dimensionless	0.81066
p	dimensionless	68.26
q	dimensionless	0.919
v_d	m/sec	0.03
ρ_b	kg/m ³	1450
t	m	0.01
C_c	g/m ³	0
d	m	0.1524
P_T	dimensionless	0.4
P_a	dimensionless	0.4
T	K	298
R	atm-m ³ /mol-K	8.21E-05
U_{in}	m/sec	5.73
D_{ether}	cm ² /sec	8.56E-06
m_a	gm/cm-sec	0.000181
r_a	g/cm ³	0.0012
RF	1/year	300
K_{ef}	tons/acre	0.3
CM	dimensionless	1
P	dimensionless	1
D	m	100
$V_{stream} (2^{nd} \text{ order})$	L/year	3.40E+11
$V_{stream} (5^{th} \text{ order})$	L/year	3.30E+09
TR	dimensionless	1.00E-05
$AT (\text{carcinogens})$	years	75

Variable Abbreviation*	Units	Value
EF	days/year	350
IFW_{adj}	L-year/kg-day	1.07
ED	days/year	30
CR (water)	L/day	2
BW (adult)	kg	72
t_{event} (adult)	hours/event	0.25
t_{event} (child)	hours/event	0.33
BW (child)	kg	15
EV	events/day	1
A_{skin} (adult)	cm ²	20000
A_{skin} (child)	cm ²	7900
IFA_{adj}	m ³ -year/kg-day	11.5
ET_{comp} (shower)	days/shower	0.00792
ET_{comp} (bathroom)	days/shower	0.0338
ET_{comp} (house)	days/shower	0.625
VR_{comp} (shower)	m ³ /hour	6
VR_{comp} (bathroom)	m ³ /hour	18
VR_{comp} (house)	m ³ /hour	140
W_{comp} (shower)	L/hour	330
W_{comp} (bathroom)	L/hour	330
W_{comp} (house)	L/hour	8.4
Φ_{Rn}	dimensionless	0.7
C	(m ² /sec) ^{-2/3}	2.00E+06
CR_{fish}	kg/day	0.02
F_c	dimensionless	1
F_{inhal}	percent	0.125
IR	m ³ /day	20
IFS_{adj}	mg-year/kg-day	113
CR_{soil}	mg/day	200
ED (child)	years	6
THQ	dimensionless	0.1
AT (non-carcinogens)	years	30
ρ_{db}	kg/L	1.5
Θ_w	L_{water}/L_{soil}	0.15
Θ_a	L_{air}/L_{soil}	0.28
f_{oc}	g/g	0.006
n	L_{pore}/L_{soil}	0.43
ρ_s	kg/L	2.65

* For names of variables see the Table of Contents