

**TABLE 2**  
**Deterministic Exposure Factors – Construction Workers**

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004c
Dermal adherence factor, soil	AF <sub>cw</sub>	0.3	mg/cm <sup>2</sup>	USEPA 2002a
Averaging time, carcinogenic	AT <sub>c</sub>	70	years	USEPA 2002a
Averaging time, carcinogenic for inhalation exposures	AT <sub>c</sub>	613200	hours	--
Averaging time, non-carcinogenic	AT <sub>nc</sub>	1	years	Based on ED <sub>cw</sub>
Averaging time, non-carcinogenic for inhalation exposures	AT <sub>nc</sub>	8760	hours	--
Relative bioavailability	BIO	---chemical-specific---		
Adult body weight	BW	70	kg	USEPA 2002a
Exposure frequency, soil	EF <sub>cw</sub>	250	days/year	USEPA 2002a
Exposure duration	ED <sub>cw</sub>	1	years	(1)
Construction worker exposed surface area, soil	SA	3,300	cm <sup>2</sup> /day	USEPA 2002a
Construction worker soil ingestion rate	IR <sub>cw</sub>	330	mg/day	USEPA 2002a
Exposure time, indoors	ET <sub>i</sub>	0	hours/day	(2)
Exposure time, outdoors	ET <sub>o</sub>	8	hours/day	(2)
Conversion factor	CF <sub>1</sub>	1000	ug/mg	
Conversion factor	CF <sub>2</sub>	1000	g/kg	
Conversion factor	CF <sub>3</sub>	1000000	cm <sup>3</sup> /m <sup>3</sup>	
Conversion factor	CF <sub>4</sub>	1E-06	kg/mg	
<b>Radionuclide-Specific Factors</b>				
Conversion factor	CF <sub>2</sub>	1000	g/kg	
Conversion factor	CF <sub>5</sub>	0.001	g/mg	
Conversion factor	CF <sub>DY</sub>	365	days/year	
Conversion factor	CF <sub>HD</sub>	24	hours/day	
Inhalation rate, adult	InhR	0.833	m <sup>3</sup> /hour	USEPA 2002a
Construction worker area correction factor	ACF	---site specific---		(3)
Gamma shielding factor	GSF	0.4	unitless	USEPA 2000a, 2009a

(1) Based on site data. A one-year exposure duration is appropriate for carcinogenic effects, because the methodology averages exposures over a lifetime (see USEPA 2002a).

(5) Assumes worker spends 100% of time outdoors, 8 hours a day.

(3) A value of 1.0 applies to sites of 1 ha size or larger. ACF values for smaller sites are available from Table 5-1 of the Technical Background Document of USEPA 2000a.