

Table 7b
Mass of ²³⁵U & Pu by neutron (NDA)

Method	Instrument*	Chemical Form	Material	Uncertainty (% rel., k=1)		ITV (% rel., k=1)
				u(r)	u(s)	
PNCC	HLNC	Pu Oxide	Can	1.0	0.5	1.1
		MOX	MOX (Pu mass fraction > 10 %)	2.0	0.5	2.1
			MOX (Pu mass fraction < 10 %)	4.0	1.5	4.3
			MOX Rod	2.0	1.0	2.2
			FBR MOX Assemblies	2.0	1.0	2.2
			MOX (Clean Scrap)	5.0	2.0	5.4
PNCC	INVS	MOX	MOX (Pu mass fraction > 10 %)	2.5	1.5	2.9
			MOX (Pu mass fraction < 10 %)	3.5	2.5	4.3
TNCC	GBAS/ HBAS/SBAS	Pu Oxide	Glove Box	10.0	5.0	11.2
		MOX		10.0	5.0	11.2
PNCC	WDAS	Pu Oxide	Waste Drum	10.0	5.0	11.2
ANCC	AWCC	Uranium Alloy	LEU Fuel Assemblies	4.2	3.0	5.2
			HEU Fuel Assemblies	3.0	2.0	3.6
		Uranium Metal	HEU ingots, billets, etc.	6.0	3.0	6.7
ANCC (Thermal)	UNCL	Uranium Oxide	HEU FFA	1.0	1.0	1.4
		Uranium Oxide	LEU FFA	4.0	2.0	4.5
			LEU FFA with NP	4.0	2.0	4.5
ANCC (Fast)	EFCP/EFCB	Uranium Oxide	LEU FFA	2.0	1.5	2.5
			LEU FFA with NP	2.0	1.5	2.5
FNCC (Fast)	FNCL	Uranium Oxide	LEU FFA	2.0	1.5	2.5
			LEU FFA with NP	4.0	1.5	4.3
PNMC	PSMC	Pu Oxide	Can	1.0	0.5	1.1
		MOX	MOX (Clean Scrap)	4.0	1.0	4.1
			MOX (Dirty Scrap)	5.0	1.0	5.1
PNMC	ENMC	MOX	MOX (Pu mass fraction > 10 %)	2.0	0.5	2.1
			MOX (Pu mass fraction < 10 %)	3.0	1.0	3.2
PNCC	HEPC	Uranium Oxide	large LEU/NU Items	3.0	1.0	3.2
PNCC	PNCL	MOX	LWR MOX Assemblies	1.0	3.0	3.2
PNCC	PCAS	MOX	MOX (Pu mass fraction > 10 %)	2.0	0.5	2.1

*click a hyperlink to open method's narrative

Uncertainty categories:

ITV: are presented in black font

Prospective Values: are presented in blue font