



UxC Fuel Quantity & Cost Calculator

Enter the known quantity into the appropriate box below. Then press the **Calculate** button to display the equivalent volumes in the various units. To calculate Component Volumes, type a value into one of the **Component Volumes** boxes and press **Calculate**.

Assumptions

Feed Assay	0.711	w/o
Tails Assay	0.25	w/o
Product Assay	4.50	w/o
U ₃ O ₈ Cost	91.00	\$/lb U ₃ O ₈
Conversion Cost	58.00	\$/kgU as UF ₆
UF ₆ Cost	288.00	\$/kgU as UF ₆
SWU Cost	165.00	\$/SWU
UF ₆ Conv. Factor	☐ General ☐ Cameco ☒ ConverDyn	
	☐ 2.612828 ☐ 2.61283 ☒ 2.61285	
Cost Basis	☒ U ₃ O ₈ /Conv ☐ UF ₆	

Calculate

EUP Cost **\$3,860.46**

Optimal Tails Results

Optimal Tails	0.168	w/o
EUP Cost	\$3,738.47	\$/kgU EUP

Enrichment Equations

$$\text{Feed to Product} = (X_p - X_t) / (X_f - X_t)$$

$$V(x) = ((2 * x) - 100) * \ln(x / (100 - x))$$

$$\text{SWU to Product} = (V(p) - V(t)) - \text{FtoP} * (V(f) - V(t))$$

SWU: Separative Work Unit

EUP: Enriched Uranium Product

Enter Component Quantity

Quantity

U₃O₈ ☐ Pounds
 UF₆ ☐ kgU
 SWU ☐ SWU
 EUP ☐ kgU

Component Volumes

U ₃ O ₈	0.0	pounds
UF ₆	0.0	kgU
Enrichment	0.0	SWU
EUP	0.0	kgU

Product Ratios

Feed to Product	9.2191	FtoP
Function V(Feed)	486.8883	V(f)
Function V(Product)	278.0094	V(p)
Function V(Tails)	595.9017	V(t)
SWU to Product	6.8711	SWUtoP