



>>Entry Name: Selenourea, 9CI

CAS Registry Number: 630-10-4

$(\text{H}_2\text{N})_2\text{C}=\text{Se}$

Molecular Formula: $\text{CH}_4\text{N}_2\text{Se}$

Molecular Weight: 123.016

Accurate Mass: 123.953968

Percentage Composition: C 9.76%; H 3.28%; N 22.77%; Se 64.19%

Source/Synthesis: Synth. from H_2Se + cyanamide

Use/Importance: Used for photometric detn. of Ru and Os

Physical Description: Prisms or needles (H_2O)

Melting Point: Mp 200 dec. $^\circ$ (slow heat). Mp 235 dec. $^\circ$

Other Data: Air and light sensitive

Hazard & Toxicity: LD₅₀ (rat, orl) 50 mg/kg

Aldrich: 23049-9

Fluka: 84910

Rare Chemicals Library: S61878-0

Sigma: S4254

>>Derivative: Methiodide

Synonym(s): Methylisoselenourea iodide

Physical Description: Yellow cryst.

Melting Point: Mp 187-188 dec. $^\circ$

>>Derivative: Methyl hydrogen sulfate

Synonym(s): Methylisoselenourea hydrogen sulfate

Physical Description: Yellow cryst.

Melting Point: Mp 67-70 dec. $^\circ$

Other Data: Structure: $[\text{H}_2\text{N}-\text{C}(\text{SeMe})=\text{NH}_2]\text{HSO}_4$

>>Derivative: *N*-Me

CAS Registry Number: 5533-49-3

Molecular Formula: $\text{C}_2\text{H}_6\text{N}_2\text{Se}$

Molecular Weight: 137.043

Accurate Mass: 137.969618

Percentage Composition: C 17.53%; H 4.41%; N 20.44%; Se 57.62%

Melting Point: Mp 156-157 $^\circ$

>>Derivative: *N,N*-Di-Me

CAS Registry Number: 5117-16-8

Molecular Formula: $\text{C}_3\text{H}_8\text{N}_2\text{Se}$

Molecular Weight: 151.07

Accurate Mass: 151.985268

Percentage Composition: C 23.85%; H 5.34%; N 18.54%; Se 52.27%

Physical Description: Cryst. (C_6H_6)

Melting Point: Mp 169-170 dec. $^\circ$

Other Data: Appears also to have a metastable form

Aldrich: 27888-2

>>Derivative: *N,N'*-Di-Me

CAS Registry Number: 5533-46-0

Molecular Formula: $\text{C}_3\text{H}_8\text{N}_2\text{Se}$

Molecular Weight: 151.07

Accurate Mass: 151.985268

Percentage Composition: C 23.85%; H 5.34%; N 18.54%; Se 52.27%

Melting Point: Mp 110-111 $^\circ$