

รูปแบบมาตรฐานของทองแดง (Cu)

Pattern : 4-836		Radiation = 1.540600		Quality : High		
Cu		2th	l	h	k	l
		43.298	100	1	1	1
		50.434	46	2	0	0
		74.133	20	2	2	0
Copper		89.934	17	3	1	1
Copper, syn		95.143	5	2	2	2
		116.923	3	4	0	0
		136.514	9	3	3	1
		144.723	8	4	2	0
Lattice : Face-centered cubic		Mol. weight = 63.55				
S.G. : Fm-3m (225)		Volume [CD] = 47.24				
a = 3.61500		Dx = 8.935				
	Z = 4	Dm = 8.950				
<p>Melting point: 1083° Sample preparation: It had been heated in an H2 atmosphere at 300 C. Sample source or locality: Sample from metallurgical laboratory of NBS, Gaithersburg, Maryland, USA. General comments: Impurities from 0.001-0.01%, Ag, Al, Bi, Fe, Si, Zn. Reflectance: Opaque mineral optical data on specimen from unspecified locality, R_DR% = 60.65, Disp. = Std. Vickers hardness number: VHN₁₀₀ = 96-104, General comments: Measured density and color from Dana's System of Mineralogy, 7th Ed., 199. Color: Red Additional pattern: See ICSD 64699 (PDF 85-1326). Temperature of data collection: Pattern taken at 26 C. Data collection flag: Ambient.</p>						
Swanson, Tatge., Natl. Bur. Stand. (U.S.), Circ. 539, volume I, page 15 (1953). CAS Number: 7440-50-8						
Radiation : CuKα1		Filter : Beta				
Lambda : 1.54050		d-sp : Not given				
SS/FOM : F8= 89(0.0112,8)						

รูปแบบมาตรฐานของเหล็ก (Fe)

Pattern : 6-696		Radiation = 1.540600		Quality : High		
<p>Fe</p> <p>Iron Iron, syn Also called: ferrite</p>		<p>2θ</p> <p>44.674 65.023 82.335 98.949 116.390 137.144</p>	<p>i</p> <p>100 20 30 10 12 6</p>	<p>h</p> <p>1 2 2 2 3 2</p>	<p>k</p> <p>1 0 1 2 1 2</p>	<p>l</p> <p>0 0 1 0 0 2</p>
<p>Lattice : Body-centered cubic</p> <p>S.G. : Im-3m (229)</p> <p>a = 2.86640</p>		<p>Mol. weight = 55.85</p> <p>Volume [CD] = 23.55</p> <p>Dx = 7.875</p>		<p>Z = 2</p>		
<p>Color: Gray, light gray metallic</p> <p>General comments: Total impurities of sample <0.0013% each metals and non-metals.</p> <p>Temperature of data collection: Pattern taken at 25 C.</p> <p>Sample preparation: The iron used was an exceptionally pure rolled sheet prepared at the NBS, Gaithersburg, Maryland, USA., [Moore, G., J. Met., 5 1443 (1953)]. It was annealed in an H₂ atmosphere for 3 days at 1100 C and slowly cooled in a He atmosphere.</p> <p>General comments: γ-Fe (fcc)=(1390 C) δ-Fe (bcc).</p> <p>General comments: Opaque mineral optical data on specimen from Meteorite: RR_rR_m= 57.7, Disp.=16, VHN=158 (mean at 100, 200, 300), Color values=.311, .316, 57.9, Ref.: IMA Commission on Ore Microscopy QDF.</p> <p>Additional pattern: See ICSD 64795 (PDF 85-1410).</p> <p>Data collection flag: Ambient.</p>						
<p>Swanson et al., Natl. Bur. Stand. (U.S.), Circ. 539, volume IV, page 3 (1955). CAS Number: 7439-89-6</p>						
<p>Radiation : CuKα1</p> <p>Lambda : 1.54050</p> <p>SS/FOM : F6=225(0.0044,6)</p>		<p>Filter : Beta</p> <p>d-sp : Not given</p>				

รูปแบบมาตรฐานของนิกเกิล (Ni)

Pattern : 4-850		Radiation = 1.540600		Quality : High		
Ni		2th	l	h	k	l
		44.508	100	1	1	1
		51.847	42	2	0	0
		76.372	21	2	2	0
Nickel		92.947	20	3	1	1
Nickel, syn		98.449	7	2	2	2
		121.936	4	4	0	0
		144.679	14	3	3	1
		155.666	15	4	2	0
Lattice : Face-centered cubic		Mol. weight = 58.70				
S.G. : Fm-3m (225)		Volume [CD] = 43.76				
a = 3.52380		Dx = 8.911				
	Z = 4					
<p>Color: White Sample source or locality: Sample obtained from Johnson Matthey Company, Ltd. Analysis: Spectrographic analysis show <0.01% each of Mg, Si and Ca. Temperature of data collection: Pattern taken at 26 C. Additional pattern: See ICSD 64989 (PDF 87-712). Data collection flag: Ambient.</p>						
Swanson, Tatge., Natl. Bur. Stand. (U.S.), Circ. 539, volume I, page 13 (1953). CAS Number: 7440-02-0						
Radiation : CuK α 1		Filter : Beta				
Lambda : 1.54050		d-sp : Not given				
SS/FOM : F8= 87(0.0115,8)						