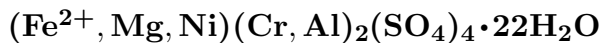


## Redingtonite



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**Crystal Data:** Monoclinic (by analogy to the halotrichite group). *Point Group:* 2. Fibrous, in massive parallel aggregates.

**Physical Properties:** Hardness = n.d.  $D(\text{meas.}) = 1.761$   $D(\text{calc.}) = \text{n.d.}$  Soluble in  $\text{H}_2\text{O}$ .

**Optical Properties:** Semitransparent. *Color:* White, purple on fractures across the fiber length. *Luster:* Silky.

*Optical Class:* Biaxial, weakly birefringent. *Orientation:* Extinction inclined  $\leq 38^\circ$ .  $\alpha = \text{n.d.}$   
 $\beta = \text{n.d.}$   $\gamma = \text{n.d.}$   $2V(\text{meas.}) = \text{n.d.}$

**Cell Data:** *Space Group:* n.d.  $Z = \text{n.d.}$

**X-ray Powder Pattern:** n.d.

### Chemistry:

	(1)	(2)
$\text{SO}_3$	35.35	34.98
$\text{Al}_2\text{O}_3$	5.14	5.57
$\text{Fe}_2\text{O}_3$	0.19	
$\text{Cr}_2\text{O}_3$	7.51	8.30
FeO	4.58	7.85
MnO	trace	
NiO	1.00	
MgO	1.85	
$\text{H}_2\text{O}^+$	14.34	
$\text{H}_2\text{O}^-$	27.08	
$\text{H}_2\text{O}$		43.30
insol.	3.46	
Total	100.50	100.00

(1) Redington mine, California, USA; corresponds to  $(\text{Fe}_{0.60}\text{Mg}_{0.43}\text{Ni}_{0.13})_{\Sigma=1.16}(\text{Al}_{0.95}\text{Cr}_{0.93})_{\Sigma=1.88}(\text{SO}_4)_4 \cdot 21.57\text{H}_2\text{O}$ . (2)  $\text{Fe}(\text{Cr}, \text{Al})_2(\text{SO}_4)_4 \cdot 22\text{H}_2\text{O}$  with Cr:Al = 1:1.

**Mineral Group:** Halotrichite group.

**Occurrence:** An oxidation product of pyrite.

**Association:** Magnesiocopiapite, pyrite.

**Distribution:** From the Redington mercury mine, Knoxville, Napa Co., California, USA.

**Name:** For its occurrence in the Redington mine, California, USA.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 529.