

Crystal Data: Hexagonal. *Point Group:* $\bar{3} 2/m, 3m$, or 32 . As anhedral grains, to 1 mm, in enstatite.

Physical Properties: *Cleavage:* Perfect on {001}. *Fracture:* Uneven. Hardness = 1.5 VHN = 82-109, 98 average (10 g load). $D(\text{meas.}) = 2.51(3)$ $D(\text{calc.}) = 2.55(1)$

Optical Properties: Opaque. *Color:* Coal-black; gray in reflected light. *Streak:* Black. *Luster:* Submetallic. *Pleochroism:* In shades of gray. *Anisotropism:* Strong; in shades of gray. *Birefractance:* Strong.

R_1 - R_2 : (400) -, (420) -, (440) 14.2-15.4, (460) 14.5-15.8, (480) 14.7-16.4, (500) 15.0-16.8, (520) 15.4-17.2, (540) 15.7-17.6, (560) 15.9-17.9, (580) 16.2-18.2, (600) 16.4-18.4, (620) 16.5-18.5, (640) 16.6-18.6, (660) 16.6-18.6, (680) 16.7-18.6, (700) 16.8-18.7

Cell Data: *Space Group:* $R\bar{3} 2/m, R3m$, or $R32$. $a = 3.326(2)$ $c = 33.29(2)$ $Z = 3$

X-ray Powder Pattern: Norton County meteorite.
11.1 (100), 5.56 (10), 2.719 (5), 3.700 (4), 2.464 (4), 2.180 (4)

Chemistry:	(1)
K	0.6
Ca	4.2
Cr	33.7
S	39.1
O	21
H	[2.65]
Total	[101.25]

(1) Norton County; by electron microprobe, average of six analyses, H calculated for oxygen content; corresponds to $(\text{Ca}_{0.17}\text{K}_{0.02})_{\Sigma=0.19}\text{Cr}_{1.04}\text{S}_{1.96} \cdot 2.14\text{H}_2\text{O}$.

Occurrence: In an enstatite achondrite meteorite, formed by terrestrial weathering of caswellsilverite.

Association: Enstatite, ferroan alabandite, troilite, daubréelite, iron oxyhydroxide.

Distribution: Found in the Norton County enstatite achondrite meteorite [TL].

Name: For *Cronus*, a Titan in Greek mythology, son of Uranus and Gaea, in allusion to a mixed meteoritic-terrestrial origin of the mineral.

Type Material: Mining Museum of the Mining Institute, Saint Petersburg, Russia.

References: (1) Britvin, S.N., X.Y. Guo, V.D. Kolomensky, M.M. Boldyreva, Y. Kretser, and M.A. Yagovkina (2001) Cronusite $\text{Ca}_{0.2}(\text{H}_2\text{O})_2\text{CrS}_2$ - a new mineral from the Norton County enstatite achondrite. *Zap. Vses. Mineral. Obshch.*, 130(3), 29-36 (in Russian with English abs.). (2) (2002) *Amer. Mineral.*, 87, 1510 (abs. ref. 1).