

**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(meas.) = 2.51(3) D(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. *Bireflectance:* Strong.

R<sub>1</sub>–R<sub>2</sub>: (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:*  $R\bar{3}m, R3m,$  or  $R32.$   $a = 3.326$   $c = 33.29$   $Z = 3$

**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)

<b>Chemistry:</b>	(1)
	Na 0.0
	K 0.6
	Ca 4.2
	Cr 33.7
	S 39.1
	O 21.
	H [2.65]
	<hr/> Total [101.25]

(1) Norton County; by electron microprobe, average of six analyses, H calculated for oxygen content; corresponds to (Ca<sub>0.17</sub>K<sub>0.02</sub>)<sub>Σ=0.19</sub>Cr<sub>1.04</sub>S<sub>1.96</sub>•2.14H<sub>2</sub>O.

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

**Association:** Enstatite, ferroan alabandite, troilite, daubréelite, iron hydroxides.

**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:** n.d.

**References:** (1) Britvin, S.N., X.Y. Guo, V.D. Kolomensky, M.M. Boldyreva, Y. Kretser, and M.A. Yagovkina (2001) Cronusite Ca<sub>0.2</sub>(H<sub>2</sub>O)<sub>2</sub>CrS<sub>2</sub> – a new mineral from the Norton County enstatite achondrite. *Zap. Vses. Mineral. Obshch.*, 130(3), 29–36 (in Russian with English abs.). (2) (????) *Amer. Mineral.*, ??, ??–?? (abs. ref. 1).