

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. As one subhedral crystal, $17\times 25\times 38\ \mu\text{m}$.

Physical Properties: *Cleavage:* n.d. *Tenacity:* n.d. *Fracture:* n.d. *Hardness* = n.d.
D(meas.) = n.d. D(calc.) = 5.523

Optical Properties: Opaque. *Color:* n.d. *Streak:* n.d. *Luster:* n.d.
Optical Class: n.d.

Cell Data: *Space Group:* $Fm\bar{3}m$. $a = 4.268(1)$ $Z = 4$

X-Ray Diffraction Pattern: Calculated pattern.
2.464 (100), 2.134 (42), 1.509 (27), 1.287 (26), 0.979 (10), 0.954 (10), 0.871 (10)

Chemistry:	(1)	(2)
V	93.71	96.19
Al	2.61	
H		2.61
Total	96.32	100.00

(1) Kishon Mid Reach zone 2, Kishon river, Haifa district, Israel; average electron microprobe analysis, H not determined but confirmed by structure analysis; corresponds to $\text{V}_{0.96}\text{Al}_{0.04}\text{H}_2$.

(2) VH₂.

Occurrence: In xenoliths in pyroclastic ejecta from basaltic volcanoes. This ultra-reduced mineral assemblage may reflect the interaction of deep-seated basaltic magmas with mantle derived CH₄ + H₂ at high fluid/melt ratios.

Association: Hibonite, grossite, spinel, vanadium, V-Al alloys.

Distribution: From bulk alluvial samples in the Kishon Mid Reach zone 2, Kishon river, Haifa district, Israel. Near Mount Carmel, Northern Israel.

Name: For the *Kishon* river, which drains Mt. Carmel and enters the sea near Haifa where the placer gemstone deposits with the studied xenoliths were collected.

Type Material: Natural History Museum, University of Florence, Italy (3364/I).

References: (1) Bindi L, F. Cámara, S.E.M. Gain, W.L. Griffin, J.-X. Huang, M. Saunders, and V. Toledo (2020) Kishonite, VH₂, and oreillyite, Cr₂N, two new minerals from the corundum xenocrysts of Mt Carmel, Northern Israel. *Minerals*, 10, 1118, 1-10. (2) Bindi, L., F. Cámara, W.L. Griffin, J.-X. Huang, S.E.M. Gain, V. Toledo, and S.Y. O'Reilly (2019) Discovery of the first natural hydride. *Amer. Mineral.* 104, 611-614.