

## MTI Corp

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# MoTe<sub>2</sub>

## Molybdenum Ditelluride

Molybdenum Ditelluride (MoTe<sub>2</sub>) can crystallize in two dimensional sheets which can be thinned down to monolayers that are flexible and almost transparent. It is a semiconductor, and can fluoresce. It is part of a class of materials called transition metal dichalcogenides. As a semiconductor the band gap lies in the infrared region. This raises the potential use as a semiconductor in electronics or an infrared detector.

Typical Physical Properties	
Molecular formula	MoTe <sub>2</sub>
Appearance	Black / Lead-gray
Crystal Structure	Hexagonal and Rhombohedral
Lattice constant	a = 3.5139, c = 13.964
Density	7.78 g/cm <sup>3</sup>
Molar Mass	351.14 g/mol