

Catalog # 93-2305 Vanadium(V) trichloride oxide, min. 99%



## Thermal Behavior:

- Melting point: -77°C
- Boiling point: 126.7°C

## Technical Notes:

1. Precursor for deposition of vanadium containing thin films.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
VO <sub>x</sub>	CVD ALD	- -	AP 1 Torr	H <sub>2</sub> O H <sub>2</sub> O	350-650°C 490°C	1 2
V <sub>1-x</sub> W <sub>x</sub> O <sub>2</sub>	CVD	-	AP	WCl <sub>6</sub> , H <sub>2</sub> O	650°C	3
V <sub>2-x</sub> M <sub>x</sub> O <sub>2</sub> M=Mo, Nb	CVD	-	AP	MCl <sub>6</sub> , H <sub>2</sub> O	650°C	4
Ti <sub>x</sub> V <sub>y</sub> O <sub>z</sub>	ALD	-	1 Torr	TiCl <sub>4</sub> , H <sub>2</sub> O	90-200°C	5

## References:

1. [Polyhedron, 2004, 23, 3087.](#)
2. [Surf. Coat. Technol. 2007, 201, 9345.](#)
3. [J. Mater. Chem. 2004, 14, 2554.](#)
4. [J. Mater. Chem. 2005, 15, 4560.](#)
5. [Russ. J. Appl. Chem. 2021, 94, 890.](#)