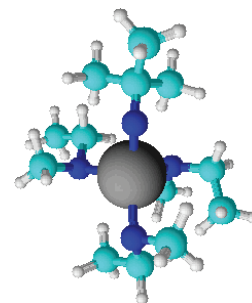


## TBTEMT Tantalum precursor. Product data.



**Chemical data** TertButylimido Tris[EthylMethylamino]Tantalum(V).

### Application & handling

- TBTEMT is an emerging tantalum precursor for depositing thin films of tantalum or tantalum nitride through CVD or ALD.
- TBTEMT is a clear, yellow liquid that reacts immediately upon contact with water or moisture.
- TBTEMT must be delivered in perfectly dry, oxygen-free piping and components to ensure particle-free processing.

### Technical data

Formula	$(t\text{-BuN})\text{Ta}[\text{N}(\text{CH}_3)(\text{CH}_2\text{CH}_3)]_3$
Molecular weight	426.38
Boiling point	98°C at 1.8 torr
Density	1.32 g/ml at 21°C
Physical characteristics	Liquid (yellow)
Thermal decomposition	N/A
Reactivity	Reacts violently with water

### Shipping information

Proper shipping name	Organometallic substance, liquid, water reactive (Tris(ethylmethylamido)(tert-butylimido)tantalum(V))
CAS no.	N/A
UN no.	3398
Class/division	4.3
Packaging group	II
Hazard labels required	Class 4.3 (Dangerous when wet)

### Hazard rating

Health	3
Flammability	1
Reactivity	2
Special notes	No descriptions



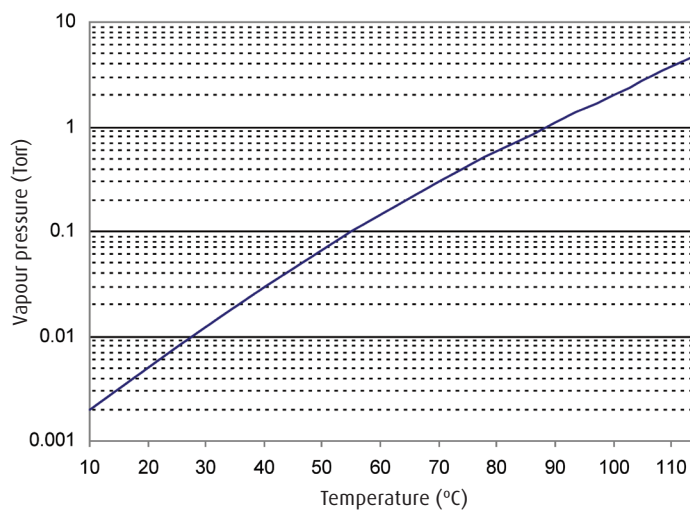
**Product information**

Grade	Up to N6 (99.9999%)
Size	TBTEMT can be packaged in canisters of varying size. Contact Linde Electronics for a size suitable for your application.
Container material	EP 316L stainless steel for all wetted parts

**Product specification**

Parameter	Specification
Assay (%)	> 99.0% based on total metallic impurities
Total impurities ppb	< 1000 ppb
Particle count (per L)	< 700
Water content (ppm)	Reacts

Contact Linde Electronics for a complete specification

**Vapour pressure curve**

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