



KJC-MOCVD-75

Last modified : 2011.8.1

# Ta(NtBu)(NEtMe)<sub>3</sub>

Tantalum t-Butylimide tris(ethylmethanamide)  
Tert-Butylimino tris(ethylmethanamino)tantalum  
TBTEMT

|                             |  |                |                                     |
|-----------------------------|--|----------------|-------------------------------------|
| Chemical formula            | Ta[NC(CH <sub>3</sub> ) <sub>3</sub> ][N(C <sub>2</sub> H <sub>5</sub> )(CH <sub>3</sub> ) <sub>2</sub> ] <sub>3</sub> |                |                                     |
| CAS No.                     | [511292-99-2]  | Formula weight | 426.37                              |
| Physical form               | Pale yellow liquid   |                |                                     |
| Density                     | 1.32(g/ml)   |                |                                     |
| Degree of association       | 1 (in benzene solution)  |                |                                     |
| Solubility                  | miscible with toluene, hexane and octane   |                |                                     |
| Air and moisture sensitive  |  |                |                                     |
| Typical impurities (ppm)    | Na <1  | K <1           | Mg <1 Ca <1 Cr <1 Fe <1 Cu <1 Ni <1 |
| Vapor pressure (as monomer) |  |                |                                     |

ca.70°C/13.3Pa

Clausius-Clapeyron equation

$$\log_{10} P = - \frac{3233}{T} + 10.54$$

 $P$ : Pa      $T$ : K