SAFC Hitech™ Enabling Technology

technical bulletin

Electronic Grade Metal Amides

Metal amides are precursors for oxide and nitride deposition by MOCVD and ALD

TRIS (DIMETHYLAMINO) ALUMINIUM (TDMAA)	$[Al(NMe_2)_3]_2$ CAS 32093-39-3 Pale Yellow solid, mp 82° C Vapour pressure 0.1 Torr at 85°C
TETRAKIS(DIETHYLAMINO) HAFNIUM (TDEAH)	$Hf(NEt_2)_4$ CAS 19962-12-0 Yellow liquid, density 1.22 Vapour pressure 0.1 Torr at 120°C
TETRAKIS(DIMETHYLAMINO) HAFNIUM (TDMAH)	$[Hf(NMe_2)_4]_2$ CAS 19962-11-9 Pale Yellow solid, mp 30°C liquid density 1.40 Vapour pressure 0.1 Torr at 60°C
TETRAKIS(DIETHYLAMINO) TITANIUM(TDEAT)	$Ti(NEt_2)_4$ CAS 4419-47-0 Orange liquid, density 0.93 Vapour pressure 0.1 Torr at 85°C 1 Torr at 120°C
TETRAKIS(DIMETHYLAMINO) TITANIUM (TDMAT)	$Ti(NMe_2)_4$ CAS 3275-24-9 Yellow liquid, density 0.96 Vapour pressure 0.1 Torr at 25°C 1 Torr at 60°, 5 Torr at 85°C
TRIS (DIMETHYLAMINO) SILANE	$(Me_2N)_3SiH$ CAS 15112-89-7 Colourless liquid, density 0.84 Vapour pressure 4 Torr at 16°C
TETRAKIS(ETHYLMETHYL) HAFNIUM (TEMAH)	$Hf(NEMe)_4$ CAS 352353-01-4 Yellow liquid, density Vapour pressure 0.1 mmHg at 79°C
TETRAKIS(DIMETHYLAMINO) SILANE (TDMAS)	$Si(NMe_2)_4$ CAS 1624-01-7 Colourless liquid, density 0.88 Boiling point 196°C