Catalog #   98-2000   Trimethylgallium, elec. gr. (99.9999%-Ga) PURATREM

$$Me\text{—}\underset{Me}{\overset{Me}{Ga}}\text{—}Me$$
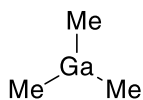
Thermal Behavior:
- Melting point -15.8°C [1]
- Boiling point 55.7°C [1]
  Vapor pressure (Torr): 22.0/-20°C;   29.7/-15°C;   39.7/-10°C;   52.4/-5°C;
  64.5 /0°C   88.6/5°C;   113.7/10°C;   144.6/15°C;
  182.3/20°C;   228.2/25°C;   283.5/30°C
  Table is available in [1, 2]

Technical Notes:
1. ALD/CVD precursor for Gallium thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Ga_2O_3	ALD PEALD	RT	1 Torr -	O_3 [PL]O_2	200-375°C Various temps	3 4-6
GaN	PEALD ALD PEALD	RT	0.25 Torr	[PL]NH_3 NH_3 [PL]N_2/H_2; Et_3Ga	185-385°C 375-425°C 200°C	7 8 9
GaS	PEALD	RT	-	[PL]H_2S/Ar	70-350°C	10
GaAs	ALD	RT	200 Torr	AsH_3	400°C	11
GaP	ALD ALD PEALD	RT	- 1 Torr	PH_3 $P(NMe_3)_3$ [PL]PH_3	500°C 400-500°C 380°C	12 13 14
InGaAs	ALD	RT	100 Torr	$InMe_3$, AsH_3, H_2	400-550°C	15
$Al_xGa_{1-x}N$	PEALD	6°C	-	$AlMe_3$, [PL]NH_3 or [PL]N_2/H_2	200°C	16
$In_xGa_{1-x}N$	PEALD	RT	-	$InMe_3$, [PL]N_2/Ag	350-450°C	17
$AlGa_xO_y$	ALD	RT	0,5-1 Torr	$AlMe_3$, H_2O, O_3	200°C	18
$InGa_xO_y$	ALD	RT	-	$InMe_3$, H_2O_2/H_2O	200°C	19

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