

UBE's Metal Organic Compounds (MO)

宇部興産の有機金属化合物

As for recent compound semiconductor, application of optical electronics, HEMT, and GaAs-IC has been making progress greater and greater. MO-CVD is used for epitaxial growth of the compound semiconductor. Before these compound semiconductor progress, we had accumulated chemical technologies about MO, for example synthesis, purification, analysis, and handling. As a result UBE's MO is evaluated highly in compound semiconductor industries for our high purity that contain extremely few impurities. Then we are keeping to make actual results for our customers who use MO-CVD for III-V group or II-VI group compound semiconductor. We have been providing them with UBE's MO for 20 years.

化合物半導体のオプトエレクトロニクス・HEMT・GaAsICなどへの応用が本格的に進められており、そのエピタキシャル結晶成長法として、MO-CVD法が使われております。当社の有機金属化合物(MO)は、化学メーカーとして蓄積された精製、分析、取り扱い技術により、不純物が極めて少ない高純度品として、高い評価を得ており、III-V族、II-VI族MO-CVD材料として多くの実績を20年に渡って重ねております。

UBE's Commercial Products

UBE's High Purity MO			MW	b.p. (°C)	m.p. (°C)
Formula 化学式	Chemical Name 化合物名	Abbreviation 略号	分子量	沸点	融点
Ga(CH ₃) ₃	Trimethyl Gallium	TMG	114.8	56	-15.8
Ga(C ₂ H ₅) ₃	Triethyl Gallium	TEG	156.9	143	-82.3
Al(CH ₃) ₃	Trimethyl Aluminum	TMA	72.1	127	15.0
In(CH ₃) ₃	Trimethyl Indium	TMIIn	159.9	136	88.4
Zn(CH ₃) ₂	Dimethyl Zinc	DMZn	95.4	44	-29.2
Zn(C ₂ H ₅) ₂	Diethyl Zinc	DEZn	123.5	118	-33.8
Mg(C ₅ H ₅) ₂	Bis(cyclopentadienyl)magnesium	Cp2Mg	154.5	150/0.1torr	177

〈Quality of UBE's MO / UBEのMOの品質〉

- Purity of each MO is higher than 99.9999% (6N). / いずれのMOも純度99.9999%以上。

〈Use of UBE's MO / UBEのMOの用途〉

- Light Emitting Diode (LED) / 発光ダイオード ● Laser Diode (LD) / レーザーダイオード
- Solar Battery / 太陽電池 ● High Electron Mobility Transistor (HEMT)
- Integrated Circuit (IC) ● Field Effect Transistor (FET)

〈Cylinder of UBE's MO〉

- Cylinder : 100ml, 150ml, 250ml, 300ml, 400ml, 600ml, 1150ml, 2600ml
- Feel free to ask us, if you have a special needs. / ご希望の荷姿に応じます。