

Plavis : Prime solution for use in vacuum chamber applications

Key Considerations for Semiconductor Manufacturing Processes

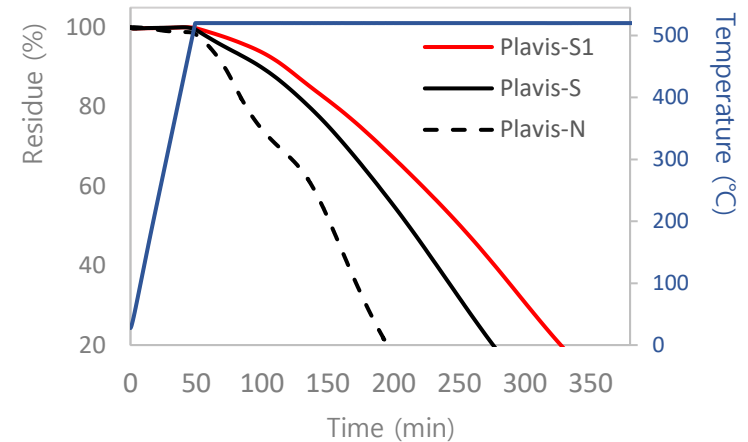
Process	PECVD	Etching	Cleaning
Recommended Features	Plasma resistance Thermal stability	Plasma resistance	Plasma resistance Thermal stability
Prime Solution	Plavis • Superior plasma resistance • Outstanding thermal oxidative stability • Excellent thermal dimensional stability		

Plavis : Prime solution for use in vacuum chamber applications

Thermal Stability : Plavis is able to endure harsh thermal conditions

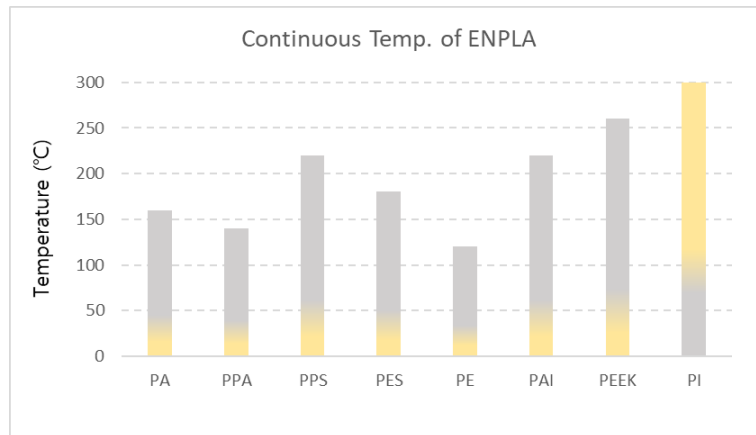
Thermal oxidation stability test

- Temperature : 30~520°C (N₂ condition)
@ 520°C (Air condition)
- Test sample : Plavis-N, Competitor
- Test method: Thermogravimetric analysis (TGA)

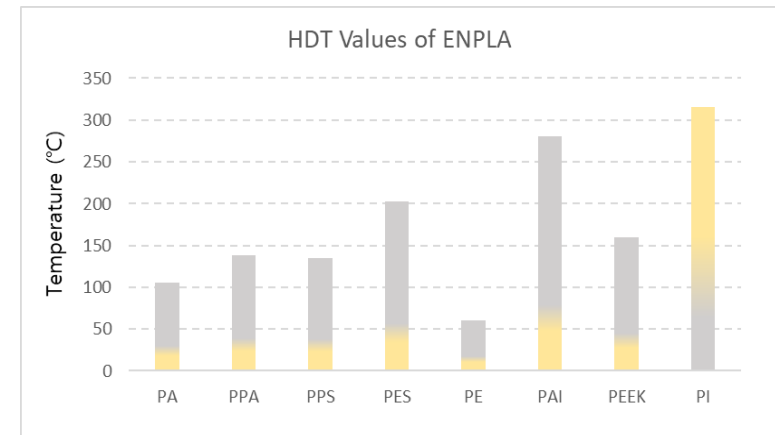


Higher thermal Property than PEEK & PAI

- Plavis-N has no observable glass transition temperature or melting point.



Continuous temperature of ENPLA



- Plavis-N has neither an observable glass transition temperature nor a melting point.

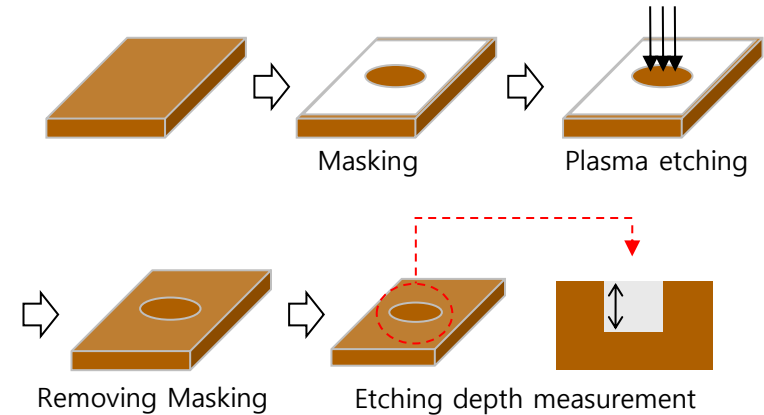
Plasma Resistance : Longer life and long-term fatigue endurance in a plasma environment

▪ Test Institute

- Korea Evaluation Institute of Electronic Technology (KEIET)

▪ Test Condition

- Test equipment : Inductively Coupled Plasma (ICP) etch system
- Gas : CF_4 , NF_3 , SF_6 , O_2 , Cl_2
- Gas flow rate : 20 sccm
- process pressure : 30 mTorr
- RF power : 2,000 W
- Bias Voltage : -150 V (CF_4 , NF_3 , SF_6 , Cl_2) -130V (O_2)
- Time : 30 min



▪ Test Results

Etch depth
($\mu\text{m}/\text{min}$)

