

LNPTM COMPOUNDS - CONDUCTIVE SOLUTIONS CARRIER TAPE- SEMICONDUCTOR APPLICATIONS

There are various types of automated packaging and transportation methods for IC chips and micro parts. Carrier tape is used for transporting electronic components from such manufacturers to end-users for automated assembly. In order to mount a large number of parts in a small space, it is necessary to supply many types of parts in a compact manner. LNPTM STAT-KONTM compounds are typically used by our customers to meet the needs for protecting electronic components from undesirable electro-static effects and this material typically exhibits good process-ability of the carrier tape.

REQUIREMENTS OF CARRIER TAPES

The following are typical benefits of LNP™ STAT-KON™ compounds and therefore these compounds may be an excellent candidate for Carrier Tapes:

- · Excellent visual quality
- Integrity during high speed processing
- Adhesion to cover tapes
- Conductive post forming
- · Dimensional stability, low shrink
- Wide processing window
- Electrical conductivity



ELECTRICALLY CONDUCTIVE COMPOUNDS

The addition of electrically conductive fillers to thermoplastic resins may typically increase the electrical conductivity, thereby aimed to reduce the risks for electrostatic charging and discharging. Traditional conductive fillers like Carbon Powder and Carbon Fibers are common and effective. Carbon powder may impart dimensional stability and warpage control on the parts whilst Carbon Fibers may typically enhance certain mechanical properties such as strength and modulus.

CONDUCTIVE GRADES FOR THE CARRIER TAPE- SEMICONDUCTOR APPLICATIONS

Grade	Description	Anticipated Features
DX02437	PC – Conductive modified	ESD protection, Standard flow
DX02437E	PC – Conductive modified	ESD protection, Higher flow version of DX02437
9X02785	PC/PBT – Conductive modified	ESD protection, Standard flow
DX09301C	PC - Conductive modified	ESD protection, clean compounding system

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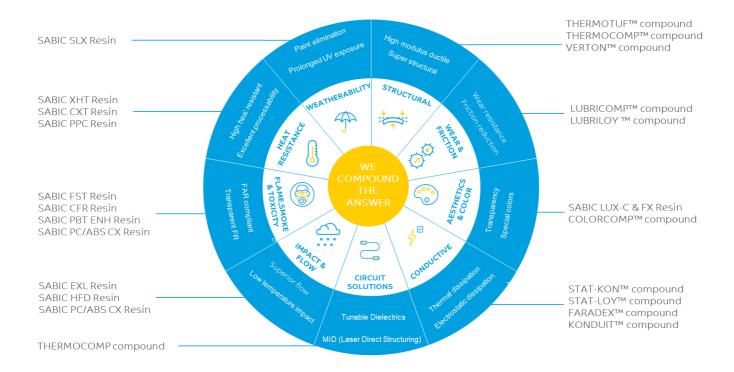
CLEAN COMPOUND POLICY

Clean compound system (CCS) materials feature low levels (ppb) of volatiles and ionic contamination from nitrates, chlorides and sulfates. They are typically used for components and handling devices in mass storage, disk drive, tape drive and optical/DVD applications. These grades can be very application specific.

KEY BENEFITS OF CLEAN COMPOUND SYSTEM (CCS) MATERIALS:

- · Aimed to reduce the potential for wafer damage
- · May promote more accurate and reliable data reading
- Possibly extends product longevity

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