LS Mateials Ultracapacitor Transportation Regulations

1st, Jan, 2021

EDLC products manufactured by LSMaterials are not subject to Dangerous Goods or Hazardous Materials transportation regulations on the grounds of UN 3499

Transport of EDLC (Electric Double Layer Capacitor)

- 1. UN Number: UN3499 CAPACITOR, electric double layer (with an energy storage capacity greater than 0.3Wh)
- 2. Proper Shipping Name: Capacitor, electric double layer
- 3. Packing Instruction Number: PI 971
- 4. Applicable Special Provision Number: 361 (A186 in ICAO / IATA & 173, 176 US DOT)
 - * NOT regulated as Dangerous Goods
- 5. Types: Capacitor and capacitors in a module.

Compliance to UN 3499 with Special Provision 361 (A186)

- Single capacitor must contain no more than 10Wh energy capacity.
- Each capacitor must have Wh rating mark on.
- Each capacitor must be designed to withstand 95 kPa pressure differential.
- Each capacitor must have a vent or weak point to relieve pressure for safety.
- Each capacitor must withstand a drop from a height of 1.2meters.
- Capacitor or modules must be protected against short circuit or fitted with a metal strap connecting terminals.
- Capacitors (modules) must be packed in a strong outer packaging constructed of suitable material and of adequate strength to prevent accidental functioning of capacitors during transport.

All capacitors manufactured by LS Materials are satisfied with applicable requirements, and therefore, may not be considered as dangerous goods under existing transportation regulation.



