

**SOLUTION**

L&amp;L Thermal

**VERSION**

March 2021

# Thermal Insulation

## Engineered Thermal Management Solution - Euro VI.

With the impending Euro-VI norms, target is to reduce levels of harmful exhaust emissions, both in petrol and diesel vehicles.

With stricter/tighter engine emission norms, which demands for ever more efficient DPF (Diesel Particulate Filter) and catalyst performance and this, in turn, requires ever more effective heat management with the desire to keep heat in the exhaust to maintain turbocharger efficiency and response.



L&L Products India have developed “High Temperature Retention Product” (Delta T of 5 - 15° C across Length of 3m & delta T of 75% - 85% across thickness) for various types of thermal management application systems, i.e. for SCR/EGR system to maintain exhaust gas temperature between inlet & outlet of defined exhaust Pipe (first Pipe to SCR/EGR system).

Developed Thermal Insulation is non-stretchable and comprises of three to eight layers, based on area of application & functional requirements (Delta T across length).

## KEY PRODUCT ATTRIBUTES

- 3 to 8 Layered Construction (Flexible/Metallic)
- The combination provides better flex properties
- Construction provides Anti-Friction & Air-Pockets to assist in circulation / Retention of hot air
- Non-toxic, has excellent hot strength and is dimensionally stable at high temperature
- Application temperature ranges from -30°C to +850°C, during continuous exposure at 800°C.
- Thermal Conductivity, k-value in range of 0.03 to 0.036 w/mk @ 22.5°C
- Delta T across Thickness in range of 75 - 85%
- Delta T across length 1m to 3m, in range of 5°C to 15°C (Depending upon construction & functional requirement's)
- Excellent chemical resistance and resistance against Grease / Mud etc

## TYPICAL AREAS OF APPLICATION

- Automotive / Transportation
  - Exhaust system (EGR/SCR)
  - Engine Manifold
  - A/C Coaches
- Genset / Other High temperature zones

