

SEAL METHODS INC.

GASKETS, SEALS, TAPES & PRECISION DIE CUTS ISO/IATF 16949 REGISTERED COMPANY



SMI MICA Solutions Custom Fabricated Parts



Mica are a group of products whose outstanding physical characteristic is that individual consists of mica crystals that can easily be split into extremely thin elastic plates. Mica products are the most cost-effective material to avoid thermal runaway! Automotive mica insulators are an ideal fit for the automotive sector. Mica is very durable and flexible if needed.

At SMI we have been able to work with mica in a variety of ways that can quickly adapt to meet the industry's ever-changing performance challenges.



With the rapid growth of the electrical vehicle market, mica is proven to be a costeffective high temp insulating barrier. Not only are we isolating battery packs and other critical components, but we are able to form the mica into the battery pack lids. We have been very instrumental in getting this approved as an automotive safety standard.

We have been able to combine the mica with Nomex, Kapton, and other high temp materials as well.

Our Team is trained and understand your needs within the battery pack. We have been involved and worked very closely in the industry since 2003.

At SMI, we are excited about the potential uses for Mica. We have multiple options to support delivery and fabrication for shielded flat parts, flexible reinforced and molded/formed parts.







SMI 200 Flat Sheet

- > Thermal shielding material
- > Good impact strength properties
- > Good flexural strength properties
- > Excellent thermal characteristics
- > Excellent electrical insulation characteristics

SMI 250 Reinforced

- > Excellent thermal characteristics
- > Good electrical insulation characteristics
- > Reinforced with glass cloth on both sides
- > Easy punched and shaped
- > Completely free of asbestos or ceramic fibres

Recommended Applications

- > Any industry manufacturing with battery's
- > Automotive
- > EV Automotive
- > Aerospace

SMI 200 Molded 3D

- > Thermal shielding material
- > Good impact strength properties
- > Good flexural strength properties
- > Excellent thermal characteristics
- Excellent electrical insulation characteristics

Features

- > Most cost-effective way to avert thermal runaway
- > High heat resistance from X to X degrees
- > Can be fabricated from sheet, reinforced and molded
- > Superior dynamic properties
- > Long shelf life
- > Universal chemical resistance

RoHS

Hazardous products listed in the EU-directive 2011/65/EU (RoHS-directive) Annex II are not used as ingredients in this material.

Application

SMI 200 Mica is flexible, could fit into various shapes and particularly designed for high temperature resistance insulation of:

- > Inter cells thermal insulation in Battery Banks and Systems for Telecommunications, Electric Vehicles and other Energy Storage Systems etc.
- > Industrial high temperature equipment like heating rings, ovens, heaters, thermal protection, thermal-electrical insulation etc.

SMI Mica Shield #200 & flexible is the rigid, mechanically strong composites which resist extreme temperatures while maintaining its thermal and electrical insulation properties. SMI Mica Shield #200 -3D is particularly designed for flame-jet proof 3D insulation parts as well as thermal and electrical insulation within and around battery packs in electric vehicles and other energy storage systems. Catastrophic damage in case of failure or rupture of a battery cell can be contained, retarded or prevented. SMI Mica Shield #200 -3D is resisting most chemicals, oils and solvents and has low water absorption.

