



AIPL GROUP



ADHESIVE TAPE AND DIECUT SOLUTIONS

FOR ELECTRIC VEHICLES & EV BATTERY INDUSTRY

strong smart stable

www.ajitindustries.com



CROSS FILAMENT TAPE FOR BUNDLING - P782

A strong and long-lasting cross-weave filament bundling tape which is specially designed for applications requiring a high breaking strength. This self-adhesive cross filament tape has a film backing and rubber adhesive. Woven glass fibers reinforce the backing, making this product extremely strong when used for EV battery module packing.



COMPRESSION PADS

- Placed between cells and battery casing accommodating expansion and contraction of cells during charging and discharging and helps in retaining cells in place during vibrations
- Available in various thickness (3mm,4mm, 8mm) and sizes, also can be given in specific shapes and sizes (die-cuts)
- Various Foam types available (EPDM (FR), Nitrile (FR), EVA etc.)



THERMAL INTERFACE MATERIALS - TIMS

TIMS are placed under the battery packs in sheet form. This sheet helps to dissipate the heat produced by the battery modules. It acts as an interface between battery module (Heat source) and battery casing, Cooling plate (Heat sink). Helps to maintain optimal operational temperature of the battery pack. Commonly used material is silicone rubber dispersed with thermally conductive particles.



Key Properties of a TIM:

- Good thermal conductivity • Lesser thermal impedance
- Good breakdown voltage and Di-electric strength

THERMAL CONDUCTIVITY - LOW TO MEDIUM

S. NO.	PRODUCT CODE	COLOUR	THICKNESS IN mm	WIDTH IN mm	LENGTH IN mm	THERMAL CONDUCTIVITY (w/mk)	HARDNESS (SHORE 00)
1	TIM-15T05	GREY	0.5	200	400	1.5	65
2	TIM-40T05	GREEN	0.5	460	460	4	70
3	TIM-10T10	GREY	1	460	460	1	60
4	TIM-15T10	GREY	1	200	400	1.5	65
5	TIM-20T10	PURPLISH BLUE	1	460	460	2	60
6	TIM-15T20	GREY	2	200	400	1.5	60

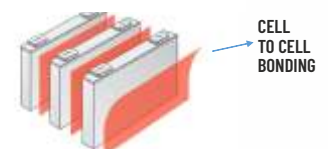
THERMAL CONDUCTIVITY - MEDIUM - HIGH

S. NO.	PRODUCT CODE	COLOUR	THICKNESS IN mm	WIDTH IN mm	LENGTH IN mm	THERMAL CONDUCTIVITY (w/mk)	HARDNESS (SHORE 00)
1	FLATO - C	BLUE	1	200	400	3.6	50
2	FEATHER - D6	GREY	0.5	200	400	4.5	65
3	RAMIEL - NEO	GREY	0.75	200	400	6	60

BMS BONDING/CELL TO CELL BONDING TAPE -P93R

Pressure-sensitive tapes can be used to bond two prismatic cells together or BMS, IOT devices in battery pack of EV, enabling the sheer advantages of using an adhesive tape over a liquid adhesive or threaded fastener such as

- Immediate bonding. Requires no curing time
- User friendly application method, does not have difficulties like mixing 2 part adhesives and pot life constraint
- Does not get loosed due to vibrations
- Product meets the dielectric / thermal requirements for the ev battery pack application



BARLEY PAPER TAPE AND RINGS – IP1270G, IP1170G

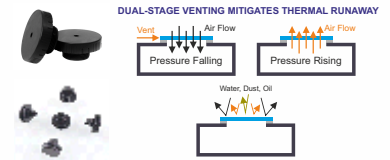
- This insulation paper is used for gasket insulation of battery pack assembly production, the better protection measures can avoid battery short circuit
- It is widely used for cell separation, layer insulation, liner insulation, module insulation, and other electrical insulation with temperatures requirement not exceeding 120°C. It has excellent Di-electric strength. Particularly resistant to acid and alkali corrosion, has good abrasion resistance
- Available in 2 thicknesses 0.18mm and 0.3mm
- Rolls available in common 65mm x 100m, 100mm x 100m 110mm x 100m (other sizes can be given)
- Rings available for various cylindrical cell such as
- 1. 18650 2. 21700 3. 26650



AIR VENT PLUGS

Function: PTFE porous membrane perform functions of waterproof and dustproof and prevent pollution and water ingress inside the case while having air permeability. Simple plug type vents does not need any special fastening.

EV Application: Battery pack venting - for pressure equalization, ventilation



PARAMETER	CAP COLOR	FILTER MEDIA	DIAMETER (mm)	HEIGHT (mm)	WEIGHT (g)	AIR FLOW RATE (ml/min) @/kpa	WATER BREAK THROUGH PRESSURE (BAR) MINIMUM VALUE	OPERATING TEMPERATURE (°C)
VALUE	BLACK	HYDRROFOBIC-OLEOPHOBIC	17	11.12	1.244	MINIMUM : 70 MAXIMUM : 90	06./30 SEC	- 40 TO 125

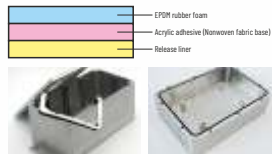
GASKET MATERIAL FOR INGRESS PROTECTION - TOPSEAL - IP67

Gasket strips which seals the battery box preventing air, water, dust, ingress inside battery pack. Our TOPSEAL EPDM foams are specially formulated to suit EV application and meet industry requirements - Fire Retardant grade, meets UL94V-0, ASTM4986.

Can be supplied in strips & diecuts in various thickness & widths

Application:

- Sealing ECUs & related components
- Sealing Li-ion battery pack and related components
- Sealing power distribution units, charging stations



POLYIMIDE TAPE FOR VARIOUS INSULATION P91, P591

Polyimide tape is applied to nickel strips of the battery pack. Silicone adhesive is used to hold down and protect the gold strips during rigorous operations, It offer high thermal resistance (Class 180°C) and conformability, ideal for insulation of nickel strips in battery packs without adding bulk weight. The product is FR grade with excellent dielectric strength and good thermal resistance



CONDUCTIVE FABRIC TAPE FOR EMI & RF SHIELDING - F2700C

- Conductive fabric tape for wire harness for electric vehicles
- Applications typically served by shielding tapes such as grounding and EMI shielding of equipment's, components etc.
- Holding power 2880 min
- Surface resistance 0.05 Ω/inch (max)
- Shielding effectiveness 75-91 dB



COPPER TAPE

- Thin copper foil backing coated with an electrically conductive, pressure sensitive acrylic adhesive, used for EMI/EMC shielding
- Specially designed for EV application
- Thickness: 65~70 micron
- Conductivity: passes 2 point test method
- ROHS compliance
- Temperature range: T2



ORANGE FABRIC TAPE

- High quality orange color polyester fabric tape
- FR grade adhesive
- Specially designed for EV's
- Flame resistance: FMVSS302
- Abrasion resistance: Class A
- Temperature range: T3 - 125°C



ORANGE WIRE HARNESS PVC TAPE

- Orange colored PVC tape in 20 mtrs. for electric vehicle
- 120 micron - thickness
- REACH compliance
- FR Grade
- Temperature range: T3 - 125°C



**AIPL CORPORATE
PROFILE**



**PRODUCTS FOR
AUTOMOTIVE INDUSTRY**

CERTIFICATIONS & CAPABILITIES



AIPL GROUP

AJIT INDUSTRIES PVT. LTD.

Adhesive Tapes & Die Cut Solutions
IATF 16949:2016 Certified | ISO 14001:2015 Certified

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