

COATING MATERIALS

TML coating materials are used for water- or moisture-proofing over bonded strain gauges. For long-term use or field measurement, the strain gauges and connecting terminals require protection from ambient moisture.



TYPE	Materials	Content per unit	Operational temperature	Curing conditions
W-1	Microcrystalline wax solid	Single 500g.	0~+50°C	Hot melting 100~120°C, hardening in room temperature
N-1	Neoprene rubber	90g	-30~+80°C	Air-drying solvent-thinned a half day in room temperature
K-1	Special rubber	90g	-196~+60°C	Air-drying solvent-thinned a half day in room temperature
SB tape	Buthyl	10mm×3mm 5m long/roll	-30~+80°C	Pressure sensitive
VM tape	Buthyl	38mm×1mm 6m long/roll	-20~+80°C	
Epoxy resin	Epoxy	AW106 canned 1.8kg	-60~+100°C	Two-component room-temperature - curing Mixing ratio 10 to 8
		Araldite standard tube 170ml		
Epoxy resin AV138	Epoxy	Canned 1.4kg	-60~+180°C	Two-component room-temperature - curing Mixing ratio 10 to 4
Three Bond 1521B	Chloroprene rubber	150ml	-30~+100°C	Air-drying solvent-thinned a half day in room temperature
KE-348	Silicon rubber	100g	-50~+200°C	Air-drying solvent-thinned a half day in room temperature
TSE3976-B	Silicon rubber	100g	-50~+300°C	Air-drying solvent-thinned a half day in room temperature

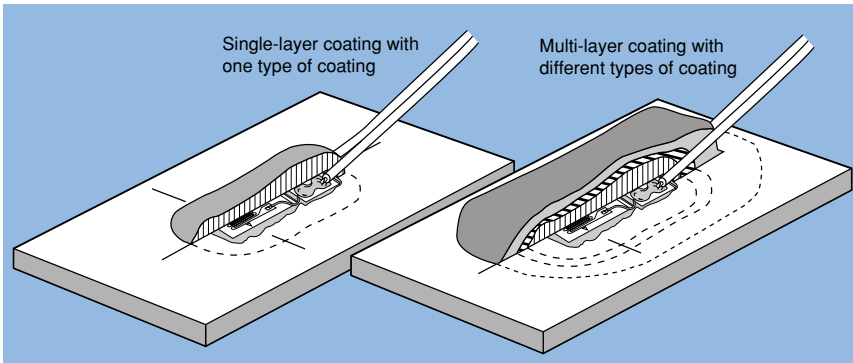
N.B.:

MSDS (Material Safety Data Sheet)

TML supplies an MSDS for all its strain gauge adhesives and coatings. Contact your TML supplier for more information.

Coatings in special substances

For use in special substances such as acids, alkalis and alcohols, contact TML or local representatives.



The type of coating required and the application method differ depending on the environment in which the strain gauge is to be used. In general, if one type of coating is not sufficient, multiple coatings can be combined to protect the strain gauges. At TML, the coating applied directly to the surface of the strain gauge is referred to as the first coating, with subsequent coating layers referred to sequentially as the second coating, third coating, etc. Multi-layer coatings are recommended for strain gauge protection.

Purpose	Applications
Moisture- and Water-proofing	General-purpose coating for laboratory and field requirements where mechanical protection is not needed, or as a prime-coat for duplex coating.
Moisture- and Water-proofing	General-purpose coating for laboratory and less severe field requirements where a high degree of mechanical protection is not needed. Long term stability
Cryogenic temperature-resistive	For laboratory requirements from cryogenic to room temperature. Does not provide a high degree of mechanical protection.
Moisture- and Water-proofing	3-mm thick tape-form coating Very convenient usage
Moisture- and Water-proofing	1-mm thick tape-form coating
Physical protection	General purpose coating for mechanical protection
Physical protection	Araldite packed in tube
Physical protection	Coating for mechanical protection in high-temperature usage
Moisture- and Water-proofing	A finish coating for multi-layer applications.
Heat-resistive	Suitable for laboratory requirements with harsh temperature conditions where a high degree of mechanical protection is not needed.
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