



## TECHNICAL SPECIFICATION

Product	LV Insulation Material		
Composition	Poly-Vinyl-Chloride (PVC)		
Colour	Dual layer yellow/grey		
Part Number	CIS2C		
General Description	A high grade, dual layer PVC insulation material. It is sold in rolls, cut-to-size and also manufactured into an array of low voltage Line Covers and kits. These finished products are used as LV barriers and PPE to insulate Network Operators & Contractors from live conductors and power lines in low voltage environments. High visibility dual layer safety feature, allows for easy scratch detection. Very robust physical, chemical and electrical properties. Better physical properties than synthetic rubbers. Excellent UV/ozone resistance.		
Chemical Properties	Excellent resistance (no attack) to Dilute and Concentrated Acids, Alcohols, Bases, Aliphatic Hydrocarbons and Mineral Oils. Good resistance (minor attack) to Vegetable Oils and Oxidising Agents. Limited resistance (moderate attack and suitable for short term use only) to Aldehydes. Poor resistance (not recommended for use) with Aldehydes, Esters, Aromatic and Halogenated Hydrocarbons and Ketones.		
Electrical Properties	Value	Units	Standard
Maximum use	650	Volts	AS-4202
Batch tested to	5000	Volts	AS-4202
Conforms with	AS-4202	Class II	AS-4202
Mechanical Properties	Value	Units	Standard
Specific Gravity	1.35	g/cm <sup>3</sup>	-
Tensile strength	17.4	Mpa	BS903 A2
Tear strength	45	N/mm	AS-1683.12
Puncture resistance	51.5	N/mm	AS-4202
Elongation	510	%	BS903 A2
Temperature range	-25 - 75	Degrees Celsius	-
Material roll size	1200 x 12000 x 2	mm	-

\*Typical values only.



MSDS

Hazard Identification	<p><i>Ingestion:</i> Not a probable route of exposure. <i>Skin:</i> Molten material will cause thermal burns. <i>Eye:</i> Mechanical irritation only. <i>Inhalation:</i> Stock shapes are not respirable, avoid inhalation of fumes if material burnt.</p>
First Aid Measures	<p>If exposed to fumes from overheating, move to fresh air. Consult a physician if symptoms persist. Wash skin with soap and plenty of water. Flush eyes with water. If molten material contacts skin, cool rapidly with cold water. Do not attempt to peel material from skin. Obtain medical attention to thermal burn.</p>
Fire Fighting Measures	<p><i>Flash ignition temperature:</i> greater than 300 degrees Celsius. <i>Unusual fire, explosion hazards:</i> PVC will not continue to burn after ignition without an external fire source. <i>Hazardous combustion products:</i> Burning liberates HCL gas. <i>Special fire fighting instructions:</i> Fire fighters and others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use. <i>Extinguishing media:</i> Water spray, CO2 or Foam extinguishing agent.</p>
Personal Protection	<p>There are no significant health hazards from vinyl compound at ambient temperatures. Inhalation of decomposition or combustion products, especially hydrogen chloride, will cause irritation of the respiratory tract, eyes and skin. Depending on the severity of exposure, physiological response will be coughing, pain and inflammation. Individuals with bronchial asthma and other types of chronic obstructive respiratory diseases may develop broncho-spasm if exposure is prolonged.</p>
Handling & Storage	<p>For maximum service life, PVC material should preferably be stored either rolled or laid flat without significant creasing to the material. It should be kept out of direct sunlight where possible and in a stable room temperature environment.</p>
Maintenance	<p>For safety purposes, the PVC and associated materials, should be regularly cleaned of contaminants, dirt and grime. This will facilitate visual inspections which should be performed regularly. This is essential for detecting any possible compromise to the integrity of the material rendering it not suitable for electrical insulation grade service.</p> <p>The necessity of regular electrical re-testing, depends on the intended application, current work practices and relevant industry standards.</p> <p>We recommend Polywater Cleaning Agent to assist in the above process.</p>