

Tapes for High Voltage

Scotch® 13

JA rubber self-fusing semi-conducting tape for field control in cable splices and terminations. Liner from smooth white polypropylene. It is permanently conformable, ozone resistant, does not cause corrosion and can be temporarily subjected to temperatures of up to 130°C. It winds with 100% elongation. It is printed with a caution both on the liner and on the tape itself so that it is not mistaken for an insulating tape.



Usage:

- control of electrical field in splices and terminations
- reduction of voltage gradient.

Scotch® 23

A black self-fusing EPR insulating tape up to 69 kV. Easily removable polypropylene liner. The tape has outstanding electrical and thermal properties and is suitable for all common cable materials (insulation and sheathing). Within a short time after application with 100 % elongation, it provides a homogenous, compact insulation mass without differentiated particular layers. Suitable for jacketing primary insulation in splices and terminations of cables insulated with plastic or rubber. It can also be easily used for insulating compound cables, where either flatter jackets (19 mm x 1.5 m) are used or the tape is torn into shorter pieces.



Usage:

- reconstruction of cable insulation up to 69 kV
- cable sheathing repairs
- moisture sealing.

Scotch® 404

Oiled crepe paper for high voltage insulation. Thanks to the crepe, it provides an additional oil tank in cable splices and terminations. Supplied in vacuum packing. It is suitable for migrating and non-migrating insulation (N and M) cables. Does not have to be heated before application. Easy to apply, the specified thickness is achieved with a smaller number of coils than with flatback tapes and the danger of air bubbles in the insulation is reduced.



Usage:

- insulation in cable splices and terminations with oiled paper insulation.

Scotch® 130C

A black self-fusing EPR based insulating tape. In contrast to Scotch® 23 there is no liner. It is formulated for operational temperatures up to 90°C, temporarily up to 130°C. Excellent physical and electrical properties. It resists weather, UV light and various temperatures. Adheres very well to all common cable insulation materials. It is mainly suitable for single-core cables or cable sheathing.



Usage:

- high voltage insulation for cable terminations and splices with insulation of plastic and rubber (EPR)
- sealing.

Scotch® 70

A silicone self-fusing tape with a liner, resistant to electric arc, leakage currents, environment, UV light, ozone and the weather. Outstanding self-fusing and self-cleaning features, it is very fine and tears well. Does not contain halogens and when burning, it only gives negligible smoke which is not aggressive or poisonous. Thanks to that, it is suitable for insulating and sealing non-flammable cables. It can stand very high temperatures up to 180°C and remains flexible even in extremely low temperatures. Resistant to cable oils, resin and impregnants. It is applied using a gentle stretch with 10 up to 100% elongation.

**Usage:**

- the top layer in cable terminations
- insulation for outdoor distributions
- transformers
- for non-flammable cables
- as an oil barrier in transition sleeves
- flexible insulation for high temperatures.

Scotch® 2220

A self-fusing tape on a liner for the control of refraction field, non-conductive. On the outside, the tape is silver (contains colloidal silver) and smooth. On the inside, where the liner is, it is sticky. When mounting, the smooth silver side has to be up. Dielectric constant 25 - 30. The tape is applicable with gentle stretch and it cannot be lengthened by adding.

Usage:

- for field control in HV splices and terminations of refractions (line refraction on the boundary of two insulants with a different dielectric constant).

Scotch® 2221

A self-fusing oil resistant mastic polyurethane tape. Supplied on a liner, suitable as an oil barrier with higher dielectric constant. Non-conductive. Medium gray color and green liner. Applied with a very fine stretch.

Usage:


- to provide oil barriers in splices and terminations for HV cables with oiled insulation.

Scotch® 401

An oiled, carbon (semi-conductive) crepe paper tape, vacuum packed. Used for controlling field in splices and terminations of cables with impregnated insulation. Suitable for migrating and non-migrating (N and M) insulation cables. Does not have to be heated before application. Easy to apply.

**Usage:**

- control of electrical fields
- reduction of voltage gradient in high voltage insulations in oil.

Catalog download:  [Kabelové soubory pro vysoké napětí.pdf](#) (700 KB)