

Technical data sheet



Product: 1601/1602/1603/1604

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: ELEKTRO

Article group: SPRAY

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3M SCOTCH INSULATING SPRAY

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3M™ Insulating Spray Scotch® 1601 / 1602 / 1603 / 1604

Product Description

3M™ Scotch® 1601 – 1602 – 1603 – 1604 Insulating Spray is an acrylic-based insulating varnish that forms a flexible and durable film which protects electrical connections, switches, switchgear and components and seals treated surfaces.

The insulating and coating sprays are UV, acid, oil and alkali resistant, resistant to moisture and weather and are characterized by a high dielectric strength, with excellent adhesion to all common materials such as metal, glass, plastic, wood, etc.

Available Colours

- 1601 – Clear
- 1602 – Red
- 1603 – Black
- 1604 – Grey

Pack Size

400ml can

Typical Properties

- UV-resistant
- solvent resistant
- resistant to acids, bases and oils
- abrasion resistant
- Moisture and weatherproof



Applications

3M™ Scotch® 1601 – 1602 – 1603 – 1604 Insulating Spray is used as a protective coating on electrical connections, switches, switchgear, terminal boards, electronic components, coils, and windings. It is also suitable for colour coding or for optical protection.

The substrate must be dry, free from oil and grease (*) and free of dust, loose buildup and corrosion. Shake the can intensively for approx. 2 minutes before use, until the stirring ball is clearly audible. At room temperature (approx. +20°C) spray at a distance of 25 - 30 cm on the surface to be coated (vertical / horizontal) and allow to dry.

Note: * Prior cleaning with Scotch® 1626 Cleaning and Degreasing Spray or Scotch® 1625 Special Contact Cleaning Spray is recommended

When over-coating, a self test for compatibility is necessary

Technical Information

Base	modified acrylic resin
Propellant	propane/butane
Solvents	aliphatic / aromatized hydrocarbons
Color	clear / black / red / gray
Dielectric strength	34 kV/mm* acc. DIN VDE 0303
Dying time at room temperature	dust dry - after 8min dry to handle - after 20-30 min paintable - after 120 min fully dry - after 48 hrs
Temperature resistance	after 700 Std. / +120°C -> no change
Weather resistance	Salt Spray Test 5% saline solution at 35 ° C -> 168 hrs
UV-resistance	Test based on DIN ISO 4892-3 (1000 hours) -> good
Chemical resistance	Test in accordance with DIN ISO 2812-1 -> good against solvents
Surface resistance	1 x 10 ¹² Ωcm

* At layer thicknesses of only 25µm or 45µm (1-2x spraying), only a dielectric strength of approx. 500V may be achieved.

Storage

3M™ Scotch® 1601 – 1602 – 1603 – 1604 Insulating Spray has a 2 year shelf life from the date of manufacture, stated on the can, when stored in humidity controlled conditions (10°C to 27°C and <75% relative humidity)

Safety Note

Pressurised Container. Protect from sunlight and temperatures above 50°C.

3M™ Scotch® 1601 – 1602 – 1603 – 1604 Insulating Spray is highly flammable, and should not be sprayed into flames. Hold the can vertically when in use, do not incline more than 30°. This product should not be inhaled, a working environment with good ventilation must be ensured.

Protect skin and eyes, use appropriate PPE. Please refer to our SDS for further information at https://www.3m.co.uk/3M/en_GB/company-uk/SDS-search/

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