

Freeze spray

KONTAKT CHEMIE Freeze 75 Super

Description:

Cooling agent, mixture of 1,1,1,2 tetrafluoroethane and difluoroethane

General properties and applications:

KONTAKT CHEMIE Freeze 75 Super is a mixture of fluorocarbons liquified under pressure. The fluid vaporises very quickly and, in doing so, extracts heat of vaporisation from the environment. As a result, the sprayed surface cools down considerably. Freeze 75 Super volatilises totally; conventional constructional materials are not attacked. The refrigerant mixture present does not have an ignition range with air. KONTAKT CHEMIE Freeze 75 Super is used therefore in particular in areas where it is essential to eliminate dangers posed by the use of flammable gases and liquids.

A typical application for the product is the location of thermal faults in electrical equipment. It is also suitable for the freeze shrinking of small components, for the removal of sticky contaminations from textiles, for the stiffening of "rubbery" materials and for the handling of histological specimens.

KONTAKT CHEMIE Freeze 75 Super contains no CFC's.

Technical data

Composition		1,1 Difluorethane 10% 1,1,1,2- Tetrafluorethane 90%
Density at 20°C	FEA 605	1,165 g/m³
Vapour pressure at 20°C at 50°C	FEA 604 FEA 604	460 kPa 1200 kPa
Heat of vaporisation at boiling point (-25°C)	Calculated	270 j/ml
Lowest temperature achievable with glass thermometer (at 20°C ,75% rel. humidity)	in-house method	-55°C
Ignition range in air	DKV Tagungsbericht, <u>17</u> , m2, 169 – 191 (1990)	non-combustible
Flammability test	FEA 610	non-flammable







Application instructions:

KONTAKT CHEMIE Freeze 75 Super is used for the location of thermal faults in electrical equipment. For this purpose the piece of equipment being tested is started up. If a fairly long period of operation is expected before faults occur, the warm-up phase can be accelerated using a hair drier. After the equipment malfunctions, suspect components are purposefully sprayed with Freeze 75 Super and changes in the function of the equipment are observed. A faulty component can quickly be located by this method.

KONTAKT CHEMIE Freeze 75 Super can be used for the shrinkage of small components. In trials it was possible, for example, to fit ball bearings of 30 mm outside diameter into transverse press fits. In moist air an ice coating forms on the surface on cooling. This ice coating is washed off before fitting, for example, using KONTAKT CHEMIE KONTAKT WL or another water-miscible solvent.

Sticky substances such as chewing gum become hard and friable when sprayed with KONTAKT CHEMIE Freeze 75 Super. They can then be teased out of fabrics without difficulty. Release papers on self-adhesive foils can readily be removed after brief spraying. Freezing with KONTAKT CHEMIE Freeze 75 Super is also suitable for the handling of soft rubber or histological sections.

Components can be immersed in a small supply of refrigerant. Well-insulated small beakers of thick-walled Styropor® (polystyrene) are suitable as containers. The latter can be made, for example, from the used safety packaging of glass bottles.

When soldering with electric soldering irons, sensitive components can be protected from overheating.

KONTAKT CHEMIE Freeze 75 Super does not attack ordinary materials. However, parts which have a sensitive reaction to rapid changes of temperature must not be treated with the product. Freeze 75 Super volatilises completely. In a high humidity, dew is deposited which freezes into ice and then forms a whitish coating which disappears of its own accord.

Using the procedures described, KONTAKT CHEMIE Freeze 75 Super is absolutely safe from a health standpoint. The freezing agent must not however be sprayed into flames. If it were, it would decompose into very toxic substances.

The product can cause frostbite to the skin. It is not suitable therefore for the treatment of sporting injuries.

Available:

Aerosol :200 ml, 400 ml

These values are not intended to be used as specifications. They are based on what we believe reliable. However it is the user's responsibility to determine the suitability.



