

# Technical Data Sheet

<b>PRODUCT DESCRIPTION:</b>	<b>Freezer</b>	<b>DATE:</b>	<b>03/97</b>
<b>PRODUCT CODE:</b>	<b>FRE200D/FRE400D</b>	<b>PAGES:</b>	<b>2</b>

## PRODUCT DESCRIPTION

**Electrolube Freezer, FRE**, is a powerful non-corrosive refrigerant for use as a rapid and safe method of cooling small components, particularly in electrical and electronic equipment, and to detect faulty soldered joints and overheating components. **Electrolube Freezer** utilises Non Ozone Depleting materials.

## PRODUCT USE

On all electrical and electronic circuitry for detection of faulty joints and overheating components, for the testing of thermostats and other thermosensitive components, repairing thermometer threads and small mechanical shrink fittings and for plumbing applications.

## FEATURES

- \* Safe - the corrosion inhibiting refrigerant is non-toxic and non-flammable making Freezer ideal for use by unskilled operatives even in high volume use.
- \* **Electrolube Freezer** has been specially formulated to induce the absolute minimum of static charge possible. This avoids the potential danger of build up of highly damaging voltages on static sensitive devices that can occur with less carefully formulated products.
- \* High pressure rapidly lowers temperature of components down to at least -50°C (dependent upon initial temperature of the component) in a matter of seconds (time taken is dependent on size, material and operating conditions of component being cooled).
- \* Prevents component damage from overheating during soldering.
- \* Extension tube aids access to components in confined and 'difficult to reach' areas.
- \* Saves time - 'dry' joint location involves measuring electrical resistance at each joint in a faulty circuit, which is both time consuming and not always conclusive due to parallel resistance paths making measurement of true joint resistance difficult, if not impossible. Using Freezer eliminates this time consuming method.
- \* Assists shrink fitting.
- \* Can be used as a plumbing aid for the treatment of cracked or leaking pipes and for cooling newly soldered joints.
- \* Compatible with most conformal coatings.

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## APPLICATION

Switch on and set up equipment so that the fault conditions caused by the 'dry' joint exist. Spray each joint in the circuit with the end of the extension tube approximately one inch from the joint. Spraying should continue until a layer of 'frost' appears on the joint, usually about 2 seconds. When the 'dry' joint is frozen, the fault condition will disappear but will return as the temperature of the joint returns to normal ambient.

A similar procedure is adopted for tracing faulty components that are overheating.

If it is necessary to cool a component for any length of time, a piece of plastic foam should be wrapped around the component and then saturated with **Freezer**. If the foam is periodically re-saturated the temperature of the component may be held below 0°C as long as required.

Fractured copper tracks on PCBs can be located by spraying over the suspect area and the fracture will appear as the copper tracks contract and part.

## TYPICAL PROPERTIES

### **FRE200D / 400D**

Form:	Colourless Gas
Density:	1.13
Flashpoint:	None
Boiling Point:	-26.5°C
Ozone Depleting Potential:	Zero

## PACKAGING

200ml Aerosol  
400ml Aerosol

## ORDER CODE

FRE200D and S  
FRE400D and S

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