CERTIFICATE OF TEST

ISSUED BY SIRA TEST & CERTIFICATION LTD

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Sira Test & Certification Ltd
South Hill, Chislehurst, Kent BR7 5EH, UK
Telephone: 0181 295 0467 Fax: 0181 295 3005

APPROVED SIGNATORY
A M Sidgwick

Customer	:	Freo-UK Haverford, SA62 5ZZ
Customer's order number	:	TBA
ST&C reference	:	119/0303
Received	:	26 August 1997
Measurements performed	:	27 August 1997 to 25 September 1997
Manufacturer	:	Freo-UK
Instrument	:	Freo-Wallet
Model	:	Dark Blue Polycotton (large crystals)
Serial number	:	D

Introduction

The Freo wallet was submitted for testing in order to investigate the effects of elevated temperature on the ability of the Freo wallet to cool its contents. In use the wallet is intended to keep insulin cooled to acceptable levels over a period approaching 48 hours. This is achieved by evaporation of water which has been absorbed by crystals, in the form of a gel, within pockets in the wallet.

Method

The Freo-wallet was activated by total immersion in cold water (approximately 5°C) in accordance with operation instructions. The wallet was immersed until each pocket was fully expanded, the surface was then dabbed dry. The Freo-wallet was then closed and suspended vertically in the centre of an environment chamber so that all surfaces of the wallet were exposed to the circulating air. The air flow rate around the wallet was measured with a Casella air meter and found to be nominally 0.35 m/s. The chamber conditions required were 37.8°C and less than 50 %rh.

The temperature measurements were made using platinum resistance thermometers (PRT's) connected to a precision resistance thermometer bridge. The temperature of the chamber was measured with two PRT's place either side of the wallet. The internal temperature of the wallet was measured with a PRT place inside the closed wallet.

The uncertainties are for a confidence probability of not less than 95%