

Material for comfort
– SMP iFit –
(SMP Dilatant-i)



SMP Technologies Inc.

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Characteristics of SMP iFit

We developed new material for comfort is 「SMP iFit」 (Patented).

The value (Dynamic $\tan \delta$) showing the recovery time when applying force is designed to be close to human skin.

Dynamic $\tan \delta$ of 「SMP iFit」 is 0.3~0.6

Each part of human body viscoelasticity
(Dynamic $\tan \delta$)

Lower arm	0 . 4 3
Palm	0 . 4 7
forehead	0 . 5 1

Motoji Takahashi, Polymer Science and Technology Vol.33, 1984

Due to 「SMP iFit」 has Dynamic $\tan \delta$ (vibration absorbing property) close to human skin, when used in a part that touches the human skin, it can be realized natural comfort and felt comfortable.

When used in earphones, etc., it is possible to achieve a better fit and high sound insulation, despite being silicone-based.

Biological safety test result

The result of Biological safety test for SMP iFit is follows.

Cytotoxicity test	non-cytotoxic
Skin sensitization test	non-sensitizer
Intradermal reaction test	non-reactive



DRAFT REPORT
Test for *in vitro* cytotoxicity: Colony formation cytotoxicity
test of iFit-T1 as per ISO 10993-5:2009(E)

Study No:
899/001

ANNEXURE 1



Assumed applications

「SMP iFit」 is expected to be utilized in various ways including the following applications.

