| JUSTAGE | | My J-STAGE Sign in | |
|--|-----------------------------|---|--|
| Food Science | e and Technology Re FSTR | Search Japanese Society for Food Science and Technology | |
| Available Issues Japanese | | >> <u>Publisher Site</u> | |
| Author: | ADVANCED Volum | ne Page | |
| Keyword: | Search | Go | |
| Add to Favorite / Citation Add to Articles Alerts Publications Alerts Publications | | | |
| <u>TOP</u> > <u>Available Issues</u> > <u>Table of Contents</u> > Abstract | | | |

| | ONE DE 1001 1001 2004 |
|--------------------------------------|---------------------------|
| | ONLINE ISSN : 1881-3984 |
| | PRINT ISSN : 1344-6606 |
| Food Science and Technology Research | |
| Vol. 9 (2003), No. 4 pp.361-363 | |
| | [PDF (125K)] [References] |

Dielectric Properties of Frozen Surimi at 915 MHz and 2450 MHz

Weijie MAO¹⁾, Manabu WATANABE¹⁾ and Noboru SAKAI¹⁾

1) Department of Food Science and Technology, Tokyo University of Marine Science and Technology

(Received: April 28, 2003) (Accepted: August 1, 2003)

Dielectric properties of two types of unsalted frozen surimi (SA grade made on shipboard and K grade made in onshore plants) at 2450 MHz and 915 MHz were measured from 30°C to 30°C by the open-ended coaxial probe method. The values of dielectric constant and loss factor varied with temperature, being very small at low temperatures, whereas above the freezing point the values increased rapidly. Penetration depths which were calculated from the dielectric constant and loss factor also varied with temperature. Moreover, there was no difference in the dielectric constant or loss factor of the two kinds of surimi below the freezing point; there was a difference in the dielectric constant above the freezing point, however, due to the difference in moisture content of the surimi.

Keywords: dielectric properties, frozen surimi, microwave thawing

[PDF (125K)] [References]

Download Meta of Article[<u>Help</u>] <u>RIS</u> BibTeX

To cite this article:

Dielectric Properties of Frozen Surimi at 915 MHz and 2450 MHz Weijie MAO, Manabu WATANABE and Noboru SAKAI, *FSTR*. Vol. **9**, 361-363. (2003).

doi:10.3136/fstr.9.361 JOI JST.JSTAGE/fstr/9.361

Copyright (c) 2007 by Japanese Society for Food Science and Technology



Japan Science and Technology Information Aggregator, Electronic JSTAGE