

# Packaging spectrum

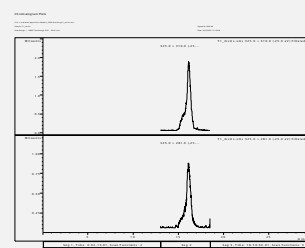
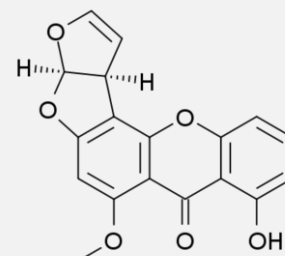
BLOK NAUKOWY PRZYGOTOWANY  
WE WSPÓŁPRACY Z SIECIĄ BADAWCZĄ ŁUKASIEWICZ  
– COBRO – INSTYTUTEM BADAWCZYM OPAKOWAŃ



## RESEARCH AND CERTIFICATION

### MYCOTOXINS IN FOOD AND FOOD PACKAGINGS - TEST METHODS. PART IV. ENVIRONMENT OF THE PRODUCTION PROCESS

One of the most dangerous contaminants of fresh or poorly processed food is the presence of mold, whose toxic mycotoxin metabolites pose a threat to human health and life. The source of dangerous microorganisms may be raw materials used for food production, packaging, but also environment of food production, packaging or storage. Mold spores can easily be carried in the air, and in the good conditions of humidity and temperature, their rapid growth may occur. The control of the mycotoxins presence in food, in packaging as well as in the production environment is aimed at eliminating factors that pose a potential threat of mycotoxin contamination of food offered to the consumer. For the testing of mycotoxins in various materials, liquid chromatography (HPLC) or gas chromatography (GC) techniques in combination with a mass spectrometry detector (MS) are successfully used.



The thematic scope of articles published in Packaging Spectrum includes the following sections: Materials and Packaging, Research and Certification, Technologies, Machines and Equipment, Logistics, Management and Marketing, Sozology and Law, Economics and the Market. We cordially invite you to cooperation and publication. Please contact editorial assistant Joanna Kuzincow, [redakcja@cobro.org.pl](mailto:redakcja@cobro.org.pl)



## **RETAIL PACKAGING TESTING**

- **Physical and mechanical tests**

Contact: M. Sc., Eng. Jacek Frydrych, Tel.: +4822 8422011 int.32, e-mail: frydrychj@cobro.org.pl;

- **Chemical and sensory tests**

Contact: M. Sc., Eng. Katarzyna Samsonowska, Tel.: +4822 8422011 int.27, e-mail: lab\_opak\_jedn@cobro.org.pl;  
PhD, Eng. Monika Kaczmarczyk, tel.: +4822 8422011 int. 42, e-mail: kaczmarczyk@cobro.org.pl

- **Examination of packaging provided with closures making it difficult for children to open**

Contact: M. Sc., Eng. Małgorzata Pawlicka, tel.: +4822 8422011 int. 55, e-mail: lab\_opak\_jedn@cobro.org.pl,  
PhD, Eng. Monika Kaczmarczyk, tel.: +4822 8422011 int. 42, e-mail: kaczmarczyk@cobro.org.pl

## **TRANSPORT PACKAGING TESTING**

- **UN certification testing**

- **B certification testing**

- **Expertise testing**

Contact: M.Sc. Eng. Andrzej Milewski, tel.: +4822 8422011 int.30, e-mail: milewski@cobro.org.pl

## **CERTIFICATION**

### **CERTIFICATION FOR AC 016 ACCREDITATION**

- **Certification for UN**

- **Re-processing**

- **Certification of packaging protected against opening by a child**

Contact: M.Sc. Eng. Andrzej Milewski, tel.: +4822 8422011 int.30, e-mail: milewski@cobro.org.pl

### **CERTIFICATION OUTSIDE THE SCOPE OF ACCREDITATION**

- **Certification for B**

- **Certification of compliance with the requirements of standards**

- **Certification of products suitable for composting**

Contact: Packaging and Environment Department, tel. 22 842 20 11 int.39, e-mail: eko@cobro.org.pl

- **Certification of the content of renewable raw materials**

Contact: MA Grzegorz Ganczewski, tel. (22) 842 20 11 int. 58 fax (22) 842 23 03, e-mail: ganczewski@cobro.org.pl

## **ECOLOGY**

- **Assessment of conformity with the requirements of the packaging**

- **LCA (Life Cycle Assessment)**

- **Calculation of greenhouse gas emissions (carbon footprint)**

- **Initial assessment of compostability**

- **Certification of the content of renewable raw materials**

- **Color measurement test**

- **COBRO recommendation: recovery organizations**

Contact: Packaging and Environment Department, tel. 22 842 20 11 int.39, e-mail: eko@cobro.org.pl

## **THE ŁUKASIEWICZ RESEARCH NETWORK EUROPE'S THIRD LARGEST RESEARCH NETWORK**



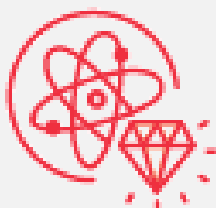
**A BRIDGE BETWEEN  
THE RESEARCH AND THE ECONOMY**



**A TRANSFER OF KNOWLEDGE  
INTO THE ECONOMY**



**RESEARCH OF AREAS OF STRATEGIC  
IMPORTANCE FOR THE COUNTRY'S  
DEVELOPMENT**



**STRENGTHENING THE INTERNATIONAL  
POSITION OF POLISH RESEARCH**



**RESEARCH AND ANALYTICAL  
RESOURCES FOR THE POLISH  
GOVERNMENT**