

## Technical Data Sheet

823/842 – Metal Detectable “Detectathene” UHMW-PE



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This Technical Data Sheet is applicable to the

823/842	Metal Detectable “Detectathene” UHMW-PE
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### Metal Detectable “Detectathene” UHMW-PE Industry use

This metal detectable UHMWPE, with an extremely high degree of polymerisation, contains a metal detectable additive and offers excellent toughness, impact strength, and wear/abrasion resistance.

Detectable UHMWPE - 'Detectathene' - FDA & EU compliant for food contact. Specifically designed for food factories to use in the food processing and packaging industries. Helping to prevent foreign body contamination.

Low friction material ideal for food processing & transportation, with good machining qualities allow for production of more intricate engineering parts.

### Features and Benefits

- Metal detectable & X-ray visible
- FDA and EU directive 2002/72 EU compliant
- Excellent release properties
- Good machining qualities allow for production of more intricate, complex parts
- Temperature Resistant up to 80°C (176°F)
- Temperature Resistant down to -200°C (-328°F) – Ideal for use in cryogenic environments
- Shore D Hardness: 15s – Value (SkalaD):68
- Abrasion: 120%
- Coefficient of Friction: <0.2 μ

### Regulatory Information

**Regulation (EC) No. 1935/2004** of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing

**Commission Regulation (EG) Nr. 2023/2006** of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food

**Commission Regulation (EU) Nr. 10/2011** of 14 January 2011 on plastic materials and articles intended to come into contact with food.

## Testing Information

This material is suitable for all types of food as a returnable material/product

Implementation of tests:

Food Simulant for migration testing	Test condition OM6
Ethanol 10%	3 x 4h at reflux
Acetic Acid 3%	3 x 4h at reflux
Vegetable oil	3 x 4h at reflux

### Determination of colour permeability:

The test was carried out in accordance with the 24<sup>th</sup> Notice on the Examination of Plastics (Federal Health Bulletin 15 (1972) 285ff) using 3% acetic acid, 10% ethanol and oil

**Ratio of food contact surface area to volume, used to establish the compliance of the material** – 6 dm<sup>2</sup> je kg

**Adequate information on the substances used or their degradation products, for which annexes I and II to Regulation (EU) NO. 10/2011 contain restrictions and/or specifications:**

Substance Name	CAS-No.	Limitations
1,1,1-Trimethylol propane	13380	SML = 6mg/kg
Iron		SML = 48 mg/kg
Manganese		SML = 0.6 mg/kg
Copper		SML = 5 mg/kg

**Substances\* which are approved as additives for plastics and as food additives (“Dual-use substances”)**

Substance Name	Ref-No.
Calcium Carbonate	170
Titanium Dioxide	171
Iron Oxide	172
Calcium Stearate	470a
Magnesium Stearate	470b
Silicon Dioxide	5521

**Information on the substances used which are subject to national legal provisions**

<b>Substance Name</b>	<b>Legal Provision</b>
Colourants	Recommendation IX. Colourants for colouring plastics and other polymers for consumer goods (as of 01.02.2015) issued by the Federal institute for Risk assessment BfR

This confirmation applies to the product supplied by us as described: the conformity test was carried out in accordance with the rules of Regulation (EU) No. 10/2011: thereafter the product complies with the specifications provided that the specified food contact conditions are observed. In the event of deviations from the food contact conditions, users must convince themselves of suitability.

The material mentioned can therefore be used for the production of reusable materials and products intended for direct contact with foodstuffs in compliance with Regulation (EU) No. 10/2011 and the aforementioned restrictions.