

# MANUFACTURER CERTIFICATION

## PUR FOOD-AS

Manufacturer certification of NORRES PUR FOOD-AS hoses regarding suitability for applications in the food sector

Polyurethane hoses of the NORRES PUR FOOD-AS series, which are made from special, particularly high-quality raw materials, are perfectly suited for many applications in the food sector. This product series includes the following hose types, with transparent, non- coloured wall:

- |                                      |                           |
|--------------------------------------|---------------------------|
| • PROTAPE® PUR-INOX 330 FOOD-AS      | variants ...1018          |
| • PROTAPE® PUR-INOX 331 FOOD-AS      | variants ...1018, ...2028 |
| • PROTAPE® PUR-C 335 FOOD-AS FLAT    | variants ...0000          |
| • AIRDUC® PUR-INOX 350 FOOD-AS       | variants ...1018          |
| • AIRDUC® PUR-INOX 351 FOOD-AS       | variants ...1018          |
| • AIRDUC® PUR-INOX 355 FOOD-AS       | variants ...1018          |
| • AIRDUC® PUR-INOX 356 FOOD-AS       | variants ...1018          |
| • AIRDUC® PUR 356 FOOD-AS REINFORCED | variants ...5114          |
| • BARDUC® PUR-INOX 382 FOOD-AS       | variants ...1014          |

The properties of the polyurethane used for the hose wall include the following:

- **EU-Directive 10/2011 and 2015/174:**  
The monomers and additives used according to the **EU-Directive 10/2011** as well as the **EC 1935/2004** and the **latest EU-Directive 2015/174**.
- **Compliance with FDA** (US Food and Drug Administration) regulations:  
The raw materials and additives used (except for stabilizers) are listed in the **FDA Code of Federal Regulations, Title 21 § 177.2600 "Rubber articles intended for repeated use"** dated April 1, 2010. The antioxidants and stabilizers used are listed in § 178.2010 „Antioxidants and/or stabilizers for polymers“.
- **BfR** (German Federal Institute for Risk Assessment, formerly BgVV):  
The monomers used in manufacture are listed in the **German Commodities Ordinance (BGVO)** published December 23, 1997 (BGBl. 1998 I, p. 5), last changed on June 24, 2013.  
The used initial substances are listed in Section 2.1, Category 1 of **Recommendation XXXIX, "Commodities based on Polyurethanes"** BfR from June 1, 1998, last changed on January 1, 2012.

To realize the antistatic properties, we add an additive to the basic material with the following properties:

- **Compliance with FDA** (US Food and Drug Administration) regulations:  
The used ingredients are comply with the following regulations of the US Food and Drug Administration (US-FDA) **21 CFR §177.2600 Food type VIII**
- **EU-Directive 10/2011** as well as **EC 1935/2004** and the **latest EU-Directive 2015/174**

When we label hoses with the official food logo of the EU, the „glass/fork“ symbol, we have an official approval for the **entire hose** in each case by an **independent testing laboratory** in accordance with the **EU-Directive 10/2011**.

The examinations carried out by an independent testing laboratory show that these product lines meet the requirements of the **EU-Directive 10/2011**, relating to plastic materials and articles intended to come into contact with foodstuffs and the German BGVO for food contact articles. Please note the official test certificate.

Note: Some of the guidelines for food contact cited above, which are based on EU Directives, lists limitations of the residual content of individual components of synthetic materials. However, it should be noted that the EU-Directive 10/2011, which applies to all EU member states, sets a limit value for the migration in synthetic products for food sector. Even if, as in this case, an official statement from the manufacturer is available, according to EU-Directive 10/2011, these tests should be performed on the end product by the processor using the corresponding foods or food simulation materials. Times and temperatures should be chosen to reflect actual conditions during the normal use of the articles, in accordance with the rule from EU-Directive 10/2011. It is the responsibility of the processor to ensure that the article is suitable for the intended purpose.)

Our quality management system is certified according to DIN/ISO 9001.