



**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 28895-2012**

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**Protective Clothing - Performance Requirements of Oil  
Repellency, Soil Release, Antistatic Clothing**

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### 1 Scope

This Standard specifies the technical requirements, test methods and labels, etc. of the oil repellency, soil release, antistatic protective clothing.

This Standard is applicable to the protective clothing worn by workers in petroleum, petrochemical and the like industries.

### 2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 250 Textiles - Tests for Color Fastness - Grey Scale for Assessing Change in Color

GB/T 2912.1 Textiles - Determination of Formaldehyde - Part 1: Free and Hydrolyzed Formaldehyde (Water Extraction Method)

GB/T 3917.3 Textiles - Tear Properties of Fabrics - Part 3: Determination of Tear Force of Trapezoid-Shaped Test Specimens

GB/T 3920 Textiles - Tests for Color Fastness - Color Fastness to Rubbing

GB/T 3921 Textiles - Tests for Color Fastness - Color Fastness to Washing with Soap or

Soap and Soda

GB/T 3922 Textiles - Testing Method for Color Fastness to Perspiration

GB/T 3923.1 Textiles - Tensile Properties of Fabrics - Part 1: Determination of Maximum Force and Elongation at Maximum Force Using the Strip Method

GB/T 5453 Textiles - Determination of the Permeability of Fabrics to Air

GB/T 7573 Textiles - Determination of pH of the Aqueous Extract

GB/T 8629-2001 Textiles - Domestic Washing and Drying Procedures for Textile Testing

GB/T 8630 Textiles - Determination of Dimensional Change in Washing and Drying

GB/T 12703.3 Textile - Evaluation for Electrostatic Properties - Part 3: Electric Charge

GB/T 12704.1 Textiles - Test Method for Water-Vapor Transmission of Fabrics -Part 1: Desiccant Method

GB/T 12903 Personal Protective Equipment Terminology

GB/T 13640 Size Designation of Protective Clothing

GB/T 13773.1 Textiles - Seam Tensile Properties of Fabrics and Made-Up Textile Articles - Part 1: Determination of Maximum Force to Seam Rupture Using the Strip Method

GB 18401 National General Safety Technical Code for Textile Products

GB/T 19977 Textiles - Oil Repellency - Hydrocarbon Resistance Test

GB 21147 Personal Protective Equipment - Protective Footwear FZ/T 81007-2003 Casual Wear

### **3 Terms and Definitions**

For the purpose of this document, the terms and definitions given in GB/T 12903 and the following apply.

#### **3.1 Soil release**

The Characteristics of the textiles that go through the soil release finishing, after being contaminated, the contamination can be removed easily by the ordinary washing method.

#### **4.1 Fabrics**

The physical and chemical properties of the fabrics of protective clothing shall meet the requirements of Table 1.

#### **5.5 The tearing strength of the fabric of protective clothing shall be tested as per**

the

method specified in GB/T 3917.3.

**5.6 The moisture permeability of the fabric of protective clothing shall be tested as per**

the method specified in GB/T 12704.1.

**5.7 The air permeability of the fabric of protective clothing shall be tested as per the**

method specified in GB/T 5453.

**5.8 The dimensional stability to washing of the fabric of protective clothing and ready-**

made clothing shall be tested as per the method specified GB/T 8630; the washing shall conform to the provisions of Procedure-5A in Table 5 of GB/T 8629-2001; while the drying shall conform to the provisions of Procedure-A in 8.1 of GB/T 8629-2001.

**5.9 The color fastness to soaping of the fabric of protective clothing shall be tested as**

per the method specified in GB/T 3921.

**5.10 The color fastness to perspiration of the fabric of protective clothing shall be tested**

as per the method specified in GB/T 3922.

**5.11 The color fastness to dry rubbing of the fabric of protective clothing shall be tested**

as per the method specified in GB/T 3920.

**5.12 The anti-static property of the ready-made protective clothing shall be tested as**

per the method specified in GB/T 12703.3.

**5.13 The shoulder, back rise strength value of the ready-made protective clothing shall**

be tested as per the method specified in GB/T 13773.1.

**5.14 The Formaldehyde of the ready-made clothing shall be tested as per the method**

specified in GB/T 2912.1. The sample of the ready-made clothing contains the adhesive materials between the fabric and auxiliary material.

**5.15 The pH value of the ready-made clothing shall be tested as per the method**

specified in GB/T 7573. The sample of the ready-made clothing contains the adhesive materials between the fabric and auxiliary material

**6.1 Inspection types**

The inspection is divided into type inspection, material inspection, exit-factory inspection and reliability sampling inspection. The test and inspection items and nonconforming classification are shown in Table 3.

- b) When there are major changes in materials, styles and processes;
- c) When the product has been in normal production for two years;
- d) When the production is stopped for more than one year and the production is resumed;
- e) When the national quality supervision agency proposes the type inspection requirements.

**6.2.2 The samples for type inspection are randomly sampled from the products that**

pass the exit-factory inspection. The sampling number of protective clothing is three sets. Refer to Table 3 for the test items.

**6.3.2 The fabric inspection shall be carried out according to the items specified in Table**

3 according to the batch, which shall be accepted after passing the inspection.

**6.4.1 The protective clothing shall be carried out exit-factory inspection by the**

manufacturer's quality inspection department according to the items specified in Table 3, and only after passing the inspection can the products leave the factory.

**6.4.2 Exit-factory inspection shall be carried out in batches, and two sets of samples**

shall be randomly selected from each batch and tested in accordance with Table 3.