

Prävention mit Kopf
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Isolationskittel

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Prävention-mit-Kopf GmbH
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HRB 27734- Amtsgericht Koblenz
Rechtsform: Gesellschaft m.b.H

Commerzbank
IBAN: DE73570400440204493100
BIC: COBADEFFXXX
USt.-IdNr. DE337526020

PRODUKTBILDER

Isolationskittel

Material : SS+PE

Größen:	L	XL
Länge:	114 cm	128 cm
Weite:	135 cm	148 cm

Zertifiziert und Hergestellt nach
ISO 13485 in Europa



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EU DECLARATION OF CONFORMITY

This Declaration of Conformity, issued under the sole responsibility of the manufacturer

DURUTEKS İNŞAAT GIDA TEKSTİL SANAYİ VE TİCARET LIMITED

Batı Sitesi Mahallesi 2308 Sk. No:51/A Yenimahalle / Ankara - Turkey

hereby declaring the following Personal Protective Equipment (PPE)

Product Description: Protective Gown Against Infective Agents, Cat. III

Product Model: DRT GOWN L01

is in conformity with the provisions of the following European Regulation

PPE (Personal Protective Equipment) Regulation

The model is in conformity with the provisions (EU) 2016/425, including fulfilment of the applicable essential health and safety requirements set out in Annex II, and with the National Standard transposing the harmonised European Standard Number(s):

EN ISO 13688:2013

Protective clothing - general requirements

EN 14126:2003/AC:2004

Protective clothing against infective agents Type PB [6]-B

EN 13034:2005+A1:2009

Chemical protective clothing offering limited protective performance against liquid chemicals Type PB [6]

and is identical to the PPE which is the subject of EU type-examination [Module B of Regulation (EU) 2016/425] referenced on the certificate number:

CE 2163-PPE-1847

(Issue Date: 27.12.2020)

Issued by

Universal Certification Surveillance Services and Trade Co.

Tatlısu Mahallesi Arif Ay Sokak No:16 Ümraniye İstanbul / TURKEY, Notified Body No. 2163

And is subject to the procedures set out in Module C2 of Regulation (EU) 2016/425 under the surveillance of Universal Certification Surveillance Services and Trade Co.

Tatlısu Mahallesi Arif Ay Sokak No:16 Ümraniye İstanbul / TURKEY, Notified Body No. 2163

Signed by: Ayşe ALTINTAŞ

General Manager

DURUTEKS İNŞAAT GIDA TEKSTİL SAN.TİC.LTD.ŞTİ.

Date: 27.12.2020

EU TYPE EXAMINATION CERTIFICATE

Certificate No: 2163-PPE-1847

DURUTEKS İNŞAAT GIDA TEKSTİL SAN. VE TİC. LTD. ŞTİ.

Batı Sitesi Mahallesi Gersan Sanayi Sitesi 2308. Sokak NO:51 Yenimahalle Ankara TURKEY

Manufacturing Site: Hürriyet Mahallesi 2201 Sokak NO:2/A Esenyurt İstanbul TURKEY

It is certified that the manufacturer's technical file (Dated 26.12.2020 Rev1) and the PPE product, detailed below, have been assessed and found to meet the applicable Essential Health and Safety Requirements in Annex II of Regulation (EU) 2016/425 based on the evaluation on technical documentation and relevant test reports.

Identification of the Personal Protective Equipment

Brand Name: DURUTEKS, Model: DRT GOWN L01

Protective gown, as a protective clothing for the part of body [PB], manufactured from blue laminated polypropylene non-woven fabric, inside over lock seams, inbound seams on the neck, touch and close fastener on the nape and with belts. The gown is available in 6 nominal sizes.

For more details, refer technical evaluation report provided to the manufacturer, dated 27.12.2020 and number 2163-KKD-1847.

The following harmonised standards have been applied:

EN ISO 13688:2013, (General requirements for protective clothing)

EN 13034:2005+A1:2009, (Chemical protective clothing offering limited protective performance against liquid chemicals) Type PB [6], limited wear life clothing,

EN 14126:2003/AC:2004, (Protective clothing against infective agents) for Type PB [6]-B,

Here by the manufacturer is allowed to use notified body number (2163) and can fix CE mark, as shown below, on the Category III product models given above, with the below requirements;

- Issuing an appropriate EU Declaration of Conformity according to **Personal Protective Equipment Regulation (EU) 2016/425 Annex 9**.
- Ongoing successful performance in fulfilment of the requirements set out in **Personal Protective Equipment Regulation (EU) 2016/425** and harmonised standards, ensured by assessments based on **Annex 7 (Module C2) or Annex 8 (Module D)** of the regulation

This certificate is initially issued on **27/12/2020** and will be valid for 5 years from the issue date.





Suat KACMAZ
UNIVERSAL CERTIFICATION
Director



TECHNICAL EVALUATION REPORT

REPORT DATE / NO: 27.12.2020 / 2163-KKD-1847

Applicant: DURUTEKS İNŞAAT GIDA TEKSTİL SAN. VE TİC. LTD. ŞTİ.

Address: Batı Sitesi Mahallesi Gersan Sanayi Sitesi 2308. Sokak NO:51 Yenimahalle Ankara TURKEY

Manufacturer: CARİNO TEKSTİL SAN. VE TİC. LTD.ŞTİ.

Address: Hürriyet Mahallesi 2201 Sokak NO:2/A Esenyurt İstanbul TURKEY

Introduction

This report is prepared based on the evaluations on the technical file of the manufacturer dated 26.12.2020 Version 1, and the test reports obtained from the laboratories for the analysis referenced by the applied harmonised standards for the personal protective equipment identified below. The applicant body holds a subcontracting manufacturing agreement based on the technical file. A list to the test reports is given below which are referenced within this report. The samples for evaluation are provided by the manufacturer for type examination and samples are delivered to the laboratories under UNIVERSAL supervision. The test results and all evaluations within this report belongs to the samples provided. The marking and information were missing on the samples. The evaluation of the marking and information requirements are conducted on the technical file. The manufacturer shall follow the instructions defined in its technical file.

This report is prepared for the PPE with the guidance of the harmonised standards which are claimed to be applied by the manufacturer and the evaluation is conducted for the verification of fulfilment of Essential Health and Safety Requirements of PPE regulation, those applies for the product.

PPE Identification: Protective gown, as a protective clothing for the part of body [PB], manufactured from blue laminated polypropylene non-woven fabric, inside over lock seams, inbound seams on the neck, touch and close fastener on the nape and with belts. The gown is available in 6 nominal sizes.

Fabric: 40 g/m² Laminated Spunbond. (20 gsm Spunbond Nonwoven + 18 gsm PP Breathable Film Laminated + 2 gsm Hotmelt)

Belt is same fabric.

Protective Gown Type: Type PB [6]-B

Brand Name: DURUTEKS

Model: DRT GOWN L01

Sizes Available: S – M – L – XL – XXL – XXXL

Applied Harmonised Standards

EN ISO 13688:2013, (General requirements for protective clothing)

EN 13034:2005+A1:2009, (Chemical protective clothing offering limited protective performance against liquid chemicals) Type PB [6], limited wear life clothing,

EN 14126:2003/AC:2004, (Protective clothing against infective agents) for Type PB[6]-B

This report is prepared on the basis of applicable Essential Health and Safety Requirements with the references annexed to each applied harmonised standard given above.

TEST REPORT INFORMATION

Report #	Laboratory Name	Report Date and Number	Competency Reference
1	Ekoteks Laboratuvar ve Gözetim Hizmetleri A.Ş.	Dated 10.12.2020 Number: 20045847-Ing	Holds TURKAK Accreditation with No: AB-0583-T
2	Çevre Endüstriyel Analiz Laboratuvarı	Dated 23.12.2020 Number: 2030397E-R1	Holds TURKAK Accreditation with No: AB-0363-T

The laboratories are contracted bodies with UNIVERSAL and the technical competence of the laboratories is also under supervision / assessment of UNIVERSAL based on the provisions of EN ISO/IEC 17065 Requirements for bodies certifying products, processes and services standard.



**ESSENTIAL HEALTH and SAFETY REQUIREMENTS GIVEN IN EUROPEAN UNION REGULATION EU 2016/425
CORRESPONDING to Annex ZA of EN ISO 13688:2013 STANDARD**

1. GENERAL REQUIREMENTS APPLICABLE TO ALL PPE

1.2. Innocuousness of PPE

1.2.1. Absence of inherent risks and other nuisance factors

PPE must be designed and manufactured so as not to create risks or other nuisance factors under foreseeable conditions of use.

1.2.1.1. Suitable constituent materials

The materials of which the PPE is made, including any of their possible decomposition products, must not adversely affect the health or safety of users

1.2.1.2. Satisfactory surface condition of all PPE parts in contact with the user

Any part of the PPE that is in contact or is liable to come into contact with the user when the PPE is worn must be free of rough surfaces, sharp edges, sharp points and the like which could cause excessive irritation or injuries.

1.4. Manufacturer's instructions and information

In addition to the name and address of the manufacturer, the instructions that must be supplied with the PPE must contain all relevant information on:

- instructions for storage, use, cleaning, maintenance, servicing and disinfection. Cleaning, maintenance or disinfectant products recommended by manufacturers must have no adverse effect on the PPE or the user when applied in accordance with the relevant instructions;
- performance as recorded during relevant technical tests to check the levels or classes of protection provided by the PPE;
- where applicable, accessories that may be used with the PPE and the characteristics of appropriate spare parts;
- where applicable, the classes of protection appropriate to different levels of risk and the corresponding limits of use;
- where applicable, the month and year or period of obsolescence of the PPE or of certain of its components;
- where applicable, the type of packaging suitable for transport;
- the significance of any markings (see point 2.12);
- the risk against which the PPE is designed to protect;
- the reference to this Regulation and, where applicable, the references to other Union harmonisation legislation;
- the name, address and identification number of the notified body or bodies involved in the conformity assessment of the PPE;
- references to the relevant harmonised standard(s) used, including the date of the standard(s), or references to the other technical specifications used;
- the internet address where the EU declaration of conformity can be accessed.

The information referred to in points (i), (j), (k) and (l) need not be contained in the instructions supplied by the manufacturer if the EU declaration of conformity accompanies the PPE.

2. ADDITIONAL REQUIREMENTS COMMON TO SEVERAL TYPES OF PPE

2.12. PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety

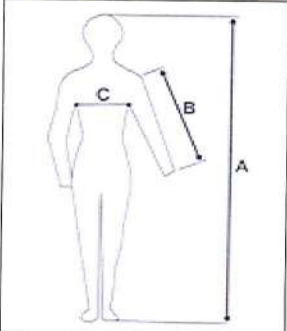

Where PPE bears one or more identification markings or indicators directly or indirectly relating to health and safety, those identification markings or indicators must, if possible, take the form of harmonised pictograms or ideograms. They must be perfectly visible and legible and remain so throughout the foreseeable useful life of the PPE. In addition, those markings must be complete, precise and comprehensible so as to prevent any misinterpretation. In particular, where such markings include words or sentences, the latter must be written in a language easily understood by consumers and other end-users, as determined by the Member State where the PPE is made available on the market.

Where PPE is too small to allow all or part of the necessary marking to be affixed, the relevant information must be mentioned on the packaging and in the manufacturer's instructions.



Technical Assessment of EN ISO 13688: 2013 Standard and other Standards it refers to, Clauses Corresponding to the Essential Health and Safety Requirements given above

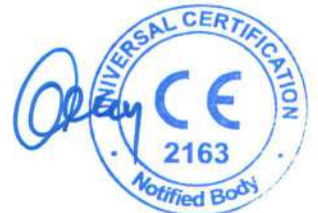
EN ISO 13688 Standard Requirements Evaluation

Article 4.2	<p>EHSR Ref 1.2.1.1;</p> <p>The manufacturer declares in his technical file that the materials used in the manufacturing process of this specific PPE do not adversely affect the health or hygiene of the user. The manufacturer claims that the materials do not, in the foreseeable conditions of normal use, release substances generally known to be toxic, carcinogenic, mutagenic, allergenic, toxic to reproduction or otherwise harmful. These declarations are supported with Material Safety Data Sheets belonging to the materials used in the manufacturing of the PPE. These datasheets claims that the materials are not toxic and do not have risks under normal conditions.</p> <p>The claim of the manufacturer includes non existence of heavy metals including Chromium VI, nonexistence of carcinogenic amines and the pH value of the material is between the allowed range by the standard (3,5 to 8,5).</p> <p>Ref: Technical File Material Identification section.</p>																
Article 4.4	<p>EHSR Ref 1.2.1.2;</p> <p>The comfort of the PPE was subject to visual inspection by our experts for rough, sharp or hard surfaces that irritate or injure the user and found to be appropriate for use. In addition such properties of the PPE was subject to evaluation during the practical exercise testing as defined in the EN ISO 17491-4 testing standard and the PPE is reported as to be comfortable enough to allow the wearer to complete the excercises in practical examination.</p>																
Article 5.3	<p>EHSR Ref 1.2.1;</p> <p>The samples received from the manufacturer are claimed to be single use. No further evaluation is conducted on the dimensional change due to cleaning</p> <p>Ref: Technical File Material Identification section.</p>																
Article 6	<p>EHSR Ref 2.12;</p> <p>The gown is available in 6 nominal sizes. The nominal sizes are defined in the technical file of the manufacturer. The given dimensions in chest or bust girth and height are found in the limits defined in Annex D of the standard.</p> <div><div></div><table><thead><tr><th>Size</th><th>A (cm)</th><th>B (cm)</th><th>C (cm)</th></tr></thead><tbody><tr><td>S-M</td><td>115-120</td><td>60-65</td><td>84-100</td></tr><tr><td>L-XL</td><td>120-125</td><td>65-70</td><td>100-116</td></tr><tr><td>XXL-3XL</td><td>125-130</td><td>70-75</td><td>116-132</td></tr></tbody></table></div>	Size	A (cm)	B (cm)	C (cm)	S-M	115-120	60-65	84-100	L-XL	120-125	65-70	100-116	XXL-3XL	125-130	70-75	116-132
Size	A (cm)	B (cm)	C (cm)														
S-M	115-120	60-65	84-100														
L-XL	120-125	65-70	100-116														
XXL-3XL	125-130	70-75	116-132														
Article 7	<p>Ref: Technical File Sizes section.</p> <p>EHSR Ref 2.12;</p> <p>Each piece of gown have marking with the following information;</p> <ul style="list-style-type: none">• Name / trademark of the manufacturer, type of product• Size of the gown• Applied product standards (Type defining product standards)• Applied protection pictograms with standard references <p>The markings on the gown / label are found to be easily visible and enough big to read. The marking</p> <div></div>																



EN ISO 13688 Standard Requirements Evaluation

	rules are explained in the marking section of the technical file. For further clarifications for the marking requirements of applied product standards are available in the relevant standard section of this report.
Article 8	<p>EHSR Ref 1.4;</p> <p>The information supplied by the manufacturer is defined in the relevant section of the technical file. This information includes explanation required by all applied product standard requirements. The defined user information text in the technical file includes the following data;</p> <ul style="list-style-type: none">• Name / trademark of the manufacturer, its address,• Applied standards and relevant classification, marking, size information• Pictograms and explanations• Gown constituent materials used• Instructions for use, controls before use, how to wear / unwear, limitations, instructions for storage conditions, complementary PPEs, re-usability, instructions for disposal <p>The above user information text is available in Turkish</p>



**ESSENTIAL HEALTH and SAFETY REQUIREMENTS GIVEN IN EUROPEAN UNION REGULATION EU 2016/425
CORRESPONDING to Annex ZA of EN ISO 13034:2005 + A1:2009 STANDARD**

1. GENERAL REQUIREMENTS APPLICABLE TO ALL PPE

1.1. Design principles

1.1.1. Ergonomics

PPE must be designed and manufactured so that, in the foreseeable conditions of use for which it is intended, the user can perform the risk-related activity normally whilst enjoying appropriate protection of the highest level possible.

1.2. Innocuousness of PPE

1.2.1. Absence of inherent risks and other nuisance factors

PPE must be designed and manufactured so as not to create risks or other nuisance factors under foreseeable conditions of use.

1.2.1.1. Suitable constituent materials

The materials of which the PPE is made, including any of their possible decomposition products, must not adversely affect the health or safety of users

1.2.1.3. Maximum permissible user impediment

Any impediment caused by PPE to the actions to be carried out, the postures to be adopted and sensory perceptions shall be minimised. Furthermore, use of the PPE must not engender actions which might endanger the user.

1.3. Comfort and effectiveness

1.3.2. Lightness and strength

PPE must be as light as possible without prejudicing its strength and effectiveness. PPE must satisfy the specific additional requirements in order to provide adequate protection against the risks for which it is intended and PPE must be capable of withstanding environmental factors in the foreseeable conditions of use.

1.3.3. Compatibility of different types of PPE intended for simultaneous use

If the same manufacturer places on the market several PPE models of different types in order to ensure the simultaneous protection of adjacent parts of the body, they must be compatible.

1.4. Manufacturer's instructions and information

In addition to the name and address of the manufacturer, the instructions that must be supplied with the PPE must contain all relevant information on:

- a) instructions for storage, use, cleaning, maintenance, servicing and disinfection. Cleaning, maintenance or disinfectant products recommended by manufacturers must have no adverse effect on the PPE or the user when applied in accordance with the relevant instructions;
- b) performance as recorded during relevant technical tests to check the levels or classes of protection provided by the PPE;
- c) where applicable, accessories that may be used with the PPE and the characteristics of appropriate spare parts;
- d) where applicable, the classes of protection appropriate to different levels of risk and the corresponding limits of use;
- e) where applicable, the month and year or period of obsolescence of the PPE or of certain of its components;
- f) where applicable, the type of packaging suitable for transport;
- g) the significance of any markings (see point 2.12);
- h) the risk against which the PPE is designed to protect;
- i) the reference to this Regulation and, where applicable, the references to other Union harmonisation legislation;
- j) the name, address and identification number of the notified body or bodies involved in the conformity assessment of the PPE;
- k) references to the relevant harmonised standard(s) used, including the date of the standard(s) or references to the other technical specifications used;
- l) the internet address where the EU declaration of conformity can be accessed.



The information referred to in points (i), (j), (k) and (l) need not be contained in the instructions supplied by the manufacturer if the EU declaration of conformity accompanies the PPE.

2. ADDITIONAL REQUIREMENTS COMMON TO SEVERAL TYPES OF PPE

2.4. PPE subject to ageing

If it is known that the design performance of new PPE may be significantly affected by ageing, the month and year of manufacture and/or, if possible, the month and year of obsolescence must be indelibly and unambiguously marked on each item of PPE placed on the market and on its packaging.

If the manufacturer is unable to give an undertaking with regard to the useful life of the PPE, his instructions must provide all the information necessary to enable the purchaser or user to establish a reasonable obsolescence month and year, taking into account the quality level of the model and the effective conditions of storage, use, cleaning, servicing and maintenance.

Where appreciable and rapid deterioration in PPE performance is likely to be caused by ageing resulting from the periodic use of a cleaning process recommended by the manufacturer, the latter must, if possible, affix a marking to each item of PPE placed on the market indicating the maximum number of cleaning operations that may be carried out before the equipment needs to be inspected or discarded. Where such a marking is not affixed, the manufacturer must give that information in his instructions.

2.12. PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety

Where PPE bears one or more identification markings or indicators directly or indirectly relating to health and safety, those identification markings or indicators must, if possible, take the form of harmonised pictograms or ideograms. They must be perfectly visible and legible and remain so throughout the foreseeable useful life of the PPE. In addition, those markings must be complete, precise and comprehensible so as to prevent any misinterpretation. In particular, where such markings include words or sentences, the latter must be written in a language easily understood by consumers and other end-users, as determined by the Member State where the PPE is made available on the market.

Where PPE is too small to allow all or part of the necessary marking to be affixed, the relevant information must be mentioned on the packaging and in the manufacturer's instructions.

3. ADDITIONAL REQUIREMENTS SPECIFIC TO PARTICULAR RISKS

3.10. Protection against substances and mixtures which are hazardous to health and against harmful biological agents

3.10.2. Protection against cutaneous and ocular contact

PPE intended to prevent the surface contact of all or part of the body with substances and mixtures which are hazardous to health or with harmful biological agents must be capable of preventing the penetration or permeation of such substances and mixtures and agents through the protective integument under the foreseeable conditions of use for which the PPE is intended.

To this end, the constituent materials and other components of those types of PPE must be chosen or designed and incorporated so as to ensure, as far as possible, complete leak-tightness, which will allow where necessary prolonged daily use or, failing this, limited leak-tightness necessitating a restriction of the period of wear.

Where, by virtue of their nature and the foreseeable conditions of their use, certain substances and mixtures which are hazardous to health or harmful biological agents possess high penetrative power which limits the duration of the protection provided by the PPE in question, the latter must be subjected to standard tests with a view to their classification on the basis of their performance. PPE which is considered to be in conformity with the test specifications must bear a marking indicating, in particular, the names or, in the absence of the names, the codes of the substances used in the tests and the corresponding standard period of protection. The manufacturer's instructions must also contain, in particular, an explanation of the codes (if necessary), a detailed description of the standard tests and all appropriate information for the determination of the maximum permissible period of wear under the different foreseeable conditions of use.



Technical Assessment of EN ISO 13034:2005 + A1:2009 Standard and other Standards it refers to, Clauses
Corresponding to the Essential Health and Safety Requirements given above

EN ISO 13034:2005 + A1:2009 Standard Requirements Evaluation

Article 4.1

EHSR Ref 1.2.1, 1.2.1.1, 1.3.2, 3.10.2;

The gown material performance are tested according to EN 14325:2018 standard for the following properties, since the gown is claimed to be for single use no cleaning cycle is applied;

Property of Material EN 14325:2018	Result Classification		Requirement of EN ISO 13034	Evaluation
4.4 Abrasion Resistance	No Abrasion @2000 revs	Class 6	Class 1 or above	Success
4.7 Trapezoidal tear resistance	Width 18.5 N Length 38.6 N	Class 1	Class 1 or above	Success
4.9 Tensile Strength	W 36.7 N L 67.6 N	Class 1	Class 1 or above	Success
4.10 Puncture Resistance	5.8 N	Class 1	Class 1 or above	Success
4.12 Liquid repellency	Sulfuric Acid (H ₂ SO ₄ %30 concentration) Sodium Hydroxide (NaOH %10 concentration) I _R > 90 %	Class 3	Class 3 at least for 1 chemical	Success
4.10 Resistance to penetration by liquids	Sulfuric Acid (H ₂ SO ₄ %30 concentration) Sodium Hydroxide (NaOH %10 concentration) o-Xylene (Non diluted) I _P < 1 %	Class 3	Class 2 at least for 1 chemical	Success

The above results are derived from the test report in the reference below. In the evaluation of the test report it was stated that all the tests are conducted with the completion of conditioning requirements as (20 ± 2) C° and (65 ± 5) % relative humidity for 24 hours.

The manufacturer do not claim a performance for the resistance to ignition or flammability of the product, in the user information sheet it is explained that the gowns must be kept away of fire.

Other requirements referred for skin compatibility, no irritation or adverse effects are evaluated in EN ISO 13688 section of this report.

Ref: Laboratory Test Report 1, Technical File

EHSR Ref 1.3.2, 3.10.2;

The affects of seams to the performance of the gown in penetration of liquid through stitch holes or through other components of a seam are evaluated in the seam strength and resistance to penetration by chemicals.

The seam strength is evaluated based on the test report as shown below; Hence the seam strength value is selected among the smallest strength among constructive seams as stated corresponding clause of this standard.

Article 4.2

Property of Material EN 14325:2018	Result Classification		Requirement of EN ISO 13034	Evaluation
5.5 Seam Strength	Refer to the strength values for seams at different parts of gown. The lowest Class is given among constructive kinds of seams	Class 1	Class 1 or above	Success
4.10 Resistance to penetration by liquids	Sulfuric Acid (H ₂ SO ₄ %30 concentration) Sodium Hydroxide (NaOH %10 concentration) o-Xylene (Non diluted) I _P < 1 %	Class 3	Class 3 at least for 1 chemical	Success

Ref: Laboratory Test Report 3



EN ISO 13034:2005 + A1:2009 Standard Requirements Evaluation

<p><i>Article 5.1,5.2</i></p>	<p>EHSR Ref 1.2.1.3, 2.4, 3.10.2;</p> <p>The requirements of the gown with respect to health and safety, ageing and sizing are evaluated in EN ISO 13688 section of this report.</p> <p>The gown under evaluation is a one piece part of body clothing. The necessary additional PPEs must be worn by the wearer for the intended use. The freedom of movements of the wearer is tested (Seven Movements) and found to be appropriate.</p> <p>Since the PPE is part of body clothing, the mist test is not conducted according to Clause 5.2.</p> <p>The above results indicates that the tested gowns complies with the resistance to penetration by liquids.</p> <p>Ref: Laboratory Test Report 1</p>
<p><i>Article 6</i></p>	<p>EHSR Ref 2.12;</p> <p>Each piece of gown have marking with the following information on the single PPE package / PPE itself;</p> <ul style="list-style-type: none"> • Name / trademark of the manufacturer, type and model of PPE • Size of the gown • Applied product standards (EN ISO 13034:2005+A1:2009) • Pictograms for protection against chemicals, invitation to read manufacturer's instructions • Shelf life and date of manufacturing <p>The above mentioned marking requirements are stated in the technical file of the manufacturer. The evaluated samples did not have all these marking and information on the PPE. The manufacturer shall follow the instructions in the technical file in case of serial manufacturing of the PPE and verify before putting the PPE on the market. The PPE gown is for single use, the markings for re-use cleaning or disinfection is discarded.</p> <p>Ref: Technical File PPE Marking section.</p>
<p><i>Article 7</i></p>	<p>EHSR Ref 1.3.3, 2.4, 2.12;</p> <p>The information supplied by the manufacturer is defined in the relevant section of the technical file. This information includes explanation required by all applied product standard requirements. The defined user information text in the technical file includes the following data;</p> <ul style="list-style-type: none"> • Name / trademark of the manufacturer, its address, or the authorised representative for EU community • Type of protection against chemicals (Type PB [6]). The information also includes a reminder for wearing necessary additional PPE in order to achieve a full body protection (i.e boots, gloves, mask and visor / face shield). • Size of the gown and model name • The standard code / name with the published year • The statement that the gown is tested against the chemical names (tested for) and performance levels for mechanical strengths including repellency and resistance to penetration of liquids (Based on EN 14325:2018 classification) • Pictogram and information that the PPE is non-reusable also the shelf life is mentioned • Instructions for use, controls before use, how to wear / unwear, limitations, instructions for storage conditions, complementary, instructions for disposal • The statement on the light spray test results • Statement for warning the user on flammability, to keep away of fire <p>The above user information text is available in Turkish</p> <p>Ref Technical File, User Information Sheet</p>

**ESSENTIAL HEALTH and SAFETY REQUIREMENTS GIVEN IN EUROPEAN UNION REGULATION EU 2016/425
CORRESPONDING to Annex ZA of EN ISO 14126:2003 + AC:2004 STANDARD**

1. GENERAL REQUIREMENTS APPLICABLE TO ALL PPE

1.1. Design principles

1.1.2.2. Classes of protection appropriate to different levels of risk

Where differing foreseeable conditions of use are such that several levels of the same risk can be distinguished, appropriate classes of protection must be taken into account in the design of the PPE.

1.3. Comfort and effectiveness

1.3.1. Adaptation of PPE to user morphology

PPE must be designed and manufactured in such a way as to facilitate its correct positioning on the user and to remain in place for the foreseeable period of use, bearing in mind ambient factors, the actions to be carried out and the postures to be adopted. For this purpose, it must be possible to adapt the PPE to fit the morphology of the user by all appropriate means, such as adequate adjustment and attachment systems or the provision of an adequate range of sizes.

1.3.2. Lightness and strength

PPE must be as light as possible without prejudicing its strength and effectiveness.

PPE must satisfy the specific additional requirements in order to provide adequate protection against the risks for which it is intended and PPE must be capable of withstanding environmental factors in the foreseeable conditions of use.

1.4. Manufacturer's instructions and information

In addition to the name and address of the manufacturer, the instructions that must be supplied with the PPE must contain all relevant information on:

- a) instructions for storage, use, cleaning, maintenance, servicing and disinfection. Cleaning, maintenance or disinfectant products recommended by manufacturers must have no adverse effect on the PPE or the user when applied in accordance with the relevant instructions;
- b) performance as recorded during relevant technical tests to check the levels or classes of protection provided by the PPE;
- c) where applicable, accessories that may be used with the PPE and the characteristics of appropriate spare parts;
- d) where applicable, the classes of protection appropriate to different levels of risk and the corresponding limits of use;
- e) where applicable, the month and year or period of obsolescence of the PPE or of certain of its components;
- f) where applicable, the type of packaging suitable for transport;
- g) the significance of any markings (see point 2.12);
- h) the risk against which the PPE is designed to protect;
- i) the reference to this Regulation and, where applicable, the references to other Union harmonisation legislation;
- j) the name, address and identification number of the notified body or bodies involved in the conformity assessment of the PPE;
- k) references to the relevant harmonised standard(s) used, including the date of the standard(s), or references to the other technical specifications used;
- l) the internet address where the EU declaration of conformity can be accessed.

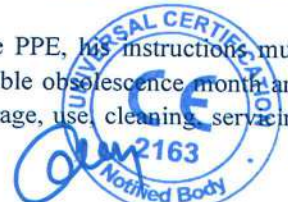
The information referred to in points (i), (j), (k) and (l) need not be contained in the instructions supplied by the manufacturer if the EU declaration of conformity accompanies the PPE.

2. ADDITIONAL REQUIREMENTS COMMON TO SEVERAL TYPES OF PPE

2.4. PPE subject to ageing

If it is known that the design performance of new PPE may be significantly affected by ageing, the month and year of manufacture and/or, if possible, the month and year of obsolescence must be indelibly and unambiguously marked on each item of PPE placed on the market and on its packaging.

If the manufacturer is unable to give an undertaking with regard to the useful life of the PPE, the instructions must provide all the information necessary to enable the purchaser or user to establish a reasonable obsolescence month and year, taking into account the quality level of the model and the effective conditions of storage, use, cleaning, servicing and maintenance.



Where appreciable and rapid deterioration in PPE performance is likely to be caused by ageing resulting from the periodic use of a cleaning process recommended by the manufacturer, the latter must, if possible, affix a marking to each item of PPE placed on the market indicating the maximum number of cleaning operations that may be carried out before the equipment needs to be inspected or discarded. Where such a marking is not affixed, the manufacturer must give that information in his instructions.

2.12. PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety

Where PPE bears one or more identification markings or indicators directly or indirectly relating to health and safety, those identification markings or indicators must, if possible, take the form of harmonised pictograms or ideograms. They must be perfectly visible and legible and remain so throughout the foreseeable useful life of the PPE. In addition, those markings must be complete, precise and comprehensible so as to prevent any misinterpretation. In particular, where such markings include words or sentences, the latter must be written in a language easily understood by consumers and other end-users, as determined by the Member State where the PPE is made available on the market.

Where PPE is too small to allow all or part of the necessary marking to be affixed, the relevant information must be mentioned on the packaging and in the manufacturer's instructions.

3. ADDITIONAL REQUIREMENTS SPECIFIC TO PARTICULAR RISKS

3.10. Protection against substances and mixtures which are hazardous to health and against harmful biological agents

3.10.2. Protection against cutaneous and ocular contact

PPE intended to prevent the surface contact of all or part of the body with substances and mixtures which are hazardous to health or with harmful biological agents must be capable of preventing the penetration or permeation of such substances and mixtures and agents through the protective integument under the foreseeable conditions of use for which the PPE is intended.

To this end, the constituent materials and other components of those types of PPE must be chosen or designed and incorporated so as to ensure, as far as possible, complete leak-tightness, which will allow where necessary prolonged daily use or, failing this, limited leak-tightness necessitating a restriction of the period of wear.

Where, by virtue of their nature and the foreseeable conditions of their use, certain substances and mixtures which are hazardous to health or harmful biological agents possess high penetrative power which limits the duration of the protection provided by the PPE in question, the latter must be subjected to standard tests with a view to their classification on the basis of their performance. PPE which is considered to be in conformity with the test specifications must bear a marking indicating, in particular, the names or, in the absence of the names, the codes of the substances used in the tests and the corresponding standard period of protection. The manufacturer's instructions must also contain, in particular, an explanation of the codes (if necessary), a detailed description of the standard tests and all appropriate information for the determination of the maximum permissible period of wear under the different foreseeable conditions of use.

Technical Assessment of EN 14126:2003 + AC:2004 Standard and other Standards it refers to, Clauses Corresponding to the Essential Health and Safety Requirements given above

EN 14126:2003 + AC:2004 Standard Requirements Evaluation

EHSR Ref 1.3.2;

Article 4.1.2

The gown material performance are tested according to EN 14325:2018 standard for the relevant properties required by the Type defining standards for protective clothing. The gown under evaluation claims compliance with Type PB [6]. The required mechanical and flammability performance levels are evaluated in the corresponding clauses of EN ISO 13034 standard within this report. No further evaluation is necessary for this standard.

EHSR Ref 1.1.2.2, 3.10.2;

Evaluation of the performance requirements against penetration by infective agents;

The gown is subjected to the tests according to ISO 16603 and ISO 16604 standards for its resistance to penetration by contaminated liquids under hydrostatic pressure. According to the obtained results of the corresponding test report;

- The gown material withstands and do not allow any penetration of bacteria under 20kPa hydrostatic pressure and is classified as **Class 6** according to Table 1 given in 4.1.4.1 Clause of this standard,
- The gown material was also subjected to evaluation of the bacteriophage test and passes the test according to ISO 16604 at 20kPa, and is classified as **Class 6** according to Table 1 given in 4.1.4.1 Clause of this standard,

The gown is tested for its resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids according to ISO 22610:2018 testing standard. The laboratory environmental conditions and the test setup parameters were inline with the standard requirements. The laboratory results indicates that the tested specimens allows penetration in first cycle of 15 minutes and classified as **Class 1** according to Table 2 of Clause 4.1.4.2 of EN 14126 standard Classification of resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids.

Article 4.1.4

The gown is tested for its resistance to penetration by contaminated solid particles according to ISO 22612:2005 testing standard. The laboratory environmental conditions and the test setup parameters were inline with the standard requirements. The laboratory results indicates that the tested 10 specimens the arithmetic mean of penetration results is smaller than 2 log cfu. The tested sample is classified as **Class 2** according to Table 4 of Clause 4.1.4.4 of EN 14126 standard Classification of resistance to penetration by contaminated solid particles.

The results of evaluation for clause 4.1.4 is summarised below;

Resistance to Penetration Property	Result Classification		Requirement of EN 14126
ISO 16604 - Resistance to penetration by contaminated liquids under hydrostatic pressure	Successful Hydrostatic pressure > 20 kPa	Class 6	To be Classified
EN ISO 22610 - Resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids.	Breakthrough time t < 15 min	Class 1	To be Classified
EN ISO 22612 - Resistance to penetration by contaminated solid particles	Penetration 1 < log cfu ≤ 2	Class 2	To be Classified

Ref: Laboratory Test Report 2

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EN 14126:2003 + AC:2004 Standard Requirements Evaluation

EHSR Ref 1.3.2;

The seam strength is evaluated and classified based on the test report as shown below;

Property of Material EN 14325:2018	Result Classification		Requirement of EN EN 14126
5.5 Seam Strength	Refer to the strength values for seams at different parts of gown. The lowest Class is given among all kinds of seams	Class 1	To be Classified

Ref: Laboratory Test Report 1

EHSR Ref 1.3.1, 3.10.2;

The PPE under evaluation conforms the relevant requirements of EN ISO 13688 standard. The requirements of the gown with respect to health and safety, ageing and sizing are evaluated in EN ISO 13688 section of this report.

EHSR Ref 2.12;

The marking requirements for protective clothing against chemicals are evaluated in the relevant section of this report. Additionally;

Each piece of gown have marking with the following information on the single PPE package / PPE itself;

- Applied product standards (EN 14126:2003+AC:2004)
- Type marking of the PPE as Type PB [6]-B
- the pictogram "protection against biological hazard"

The above mentioned marking requirements are stated in the technical file of the manufacturer. The evaluated samples did not have all these marking and information on the PPE. The manufacturer shall follow the instructions in the technical file in case of serial manufacturing of the PPE and verify before putting the PPE on the market.

Ref: Technical File PPE Marking section.

EHSR Ref 1.4;

The information supplied by the manufacturer is defined in the relevant section of the technical file. This information includes explanation required by all applied product standard requirements. The defined user information text in the technical file includes the following data;

- Name / trademark of the manufacturer, its address, or the authorised representative for EU community
- Type of protection against chemicals (Type PB [6]-B). The information also includes a reminder for wearing necessary additional PPE in order to achieve a full body protection (i.e boots, gloves, mask and visor / face shield).
- The standard number (EN 14126)
- The performance levels identified with the tests against inactive agents
- Pictogram and information that the PPE is non-reusable also the shelf life is mentioned
- Instructions for use, controls before use, how to wear / unwear, limitations, instructions for storage conditions, complementary, instructions for disposal

The above user information text is available in Turkish

Ref Technical File, User Information Sheet



Sample Photo



PPE Experts contributed to this report:

Arzu ŞEREMETLİ

Osman CAMCI



Approval
Suat KAÇMAZ
UNIVERSAL CERTIFICATION
Director



CEVRE
ENDÜSTRİYEL ANALİZ
LABORATUVARI



Test
TS EN ISO/IEC 17025
AB-0363-T

AB-0363-T

2030397E-R1

12-20

ANALİZ RAPORU

Rapor No. : 2030397E-R1

Rapor Tarihi : 23/12/2020

Firma

: UNIVERSAL SERTİFİKASYON VE GÖZETİM HİZ. TİC.LTD.ŞTİ.

Adres

: Necip Fazıl Bulvarı Keyap Sitesi E2 Blok No:44/84 Yukarı Dudullu
Ümraniye/İstanbul/Türkiye

Numune

: Önlük Model: DRT GOWN-L01

Numune Ambalajı

: Poly ambalaj

Numune Miktarı

: 5 adet

Numunenin Alındığı Yer

: -

Numune Alma Tarihi

: 27/11/2020

Seri-Parti No / Lot No

: -

İmal Tarihi

: -

Paketleme Tarihi

: -

Son Kullanma Tarihi

: -

İmalatçı Firma Adı

: Duruteks İnşaat Gıda Tekstil San. Ve Tic. Ltd. Şti. - Adres: Batı Sitesi Mah.

Mal No

: -

Mal Veren Firma No

: -

Numune Geliş Tarihi

: 30/11/2020 09:00:00

Analiz Başlangıç Tarihi

: 30/11/2020 09:15:00

Analiz Bitiş Tarihi

: 18/12/2020

Müşterimiz tarafından teslim edilen numunede yapılan analiz sonuçları

Parametreler	Birim	Bulgu	Sınıf 1	Sınıf 2	Sınıf 3	LD Kaynağı	Metot	Bilgi
Sentetik Kanın Nüfuzuna Karşı Direnç								
Test Edilen Malzemenin Ortalama Kalınlığı	mm	0,243	-	-	-	-	ISO 16603	(*) 148
Test Edilen Malzemenin Ortalama Kütlesi	g	0,2294	-	-	-	-	ISO 16603	(*) 148
Test Örneği 1 : 0 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 1 : 1,75 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 1 : 3,5 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 1 : 7 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 1 : 14 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 1 : 20 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği Kalınlığı 1	mm	0,24	-	-	-	-	ISO 16603	(*)
Test Örneği Kütlesi 1	g	0,2275	-	-	-	-	ISO 16603	(*)

Kübra HANCI AKAN

Mikrobiyoloji Laboratuvar Sorumlusu

Tasdik Olunur

23/12/2020

Ömer Yasin BALIK

Laboratuvar Müdürü

ANALİZ RAPORU

Rapor No. : 2030397E-R1

Rapor Tarihi : 23/12/2020

Müşterimiz tarafından teslim edilen numunede yapılan analiz sonuçları

Parametreler	Birim	Bulgu	Sınıf 1	Sınıf 2	Sınıf 3	LD Kaynağı	Metot	Bilgi
Test Örneği 2 : 0 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 2 : 1,75 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 2 : 3,5 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 2 : 7 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 2 : 14 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 2 : 20 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği Kalınlığı 2	mm	0,25	-	-	-	-	ISO 16603	(*)
Test Örneği Kütlesi 2	g	0,2289	-	-	-	-	ISO 16603	(*)
Test Örneği 3 : 0 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test örneği 3 : 1,75 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test örneği 3 : 3,5 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test örneği 3 : 7 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği 3 : 14 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test örneği 3 : 20 kPa	-	Başarılı	-	-	-	-	ISO 16603	(*) 149
Test Örneği Kalınlığı 3	mm	0,25	-	-	-	-	ISO 16603	(*)
Test Örneği Kütlesi 3	g	0,2319	-	-	-	-	ISO 16603	(*)
Seçilen Prosedür	-	D	-	-	-	-	ISO 16603	(*)
Mikrobiyal Penetrasyon - Kuru Bakteri								
Mikrobiyal Penetrasyon - Kuru Bakteri	log kob	1,4	2<-≤3	1<-≤2	≤1	104	ISO 22612	(*) 150, 151
Test Örneği 1 - Koloni Sayısı	kob	30	-	-	-	-	-	(*)
Test Örneği 2 - Koloni Sayısı	kob	9	-	-	-	-	-	(*)
Test Örneği 3 - Koloni Sayısı	kob	28	-	-	-	-	-	(*)
Test Örneği 4 - Koloni Sayısı	kob	37	-	-	-	-	-	(*)
Test örneği 5 - Koloni Sayısı	kob	12	-	-	-	-	-	(*)
Test Örneği 6 - Koloni Sayısı	kob	16	-	-	-	-	-	(*)
Test Örneği 7 - Koloni Sayısı	kob	25	-	-	-	-	-	(*)
Test Örneği 8 - Koloni Sayısı	kob	10	-	-	-	-	-	(*)
Test Örneği 9 - Koloni Sayısı	kob	17	-	-	-	-	-	(*)



Kübra HANCI AKAN
Mikrobiyoloji Laboratuvar Sorumlusu



Tasdik Olunur
23/12/2020
Ömer Yasin BALIK
Laboratuvar Müdürü

ANALİZ RAPORU

Rapor No. : 2030397E-R1

Rapor Tarihi : 23/12/2020

Müşterimiz tarafından teslim edilen numunede yapılan analiz sonuçları

Parametreler	Birim	Bulgu	Sınıf 1	Sınıf 2	Sınıf 3	LD Kaynağı	Metot	Bilgi
Test Örneği 10 - Koloni Sayısı	kob	22	-	-	-	-	-	(*)
Ortalama Koloni Sayısı	kob	21	-	-	-	-	-	(*)
Negatif Kontrol Sayısı 1	kob	<1	-	-	-	-	-	(*)
Negatif Kontrol Sayısı 2	kob	<1	-	-	-	-	-	(*)
Talk Konsantrasyonu	kob/g	5,5*10 ⁸	-	-	-	-	ISO 22612	(*)
Mikrobiyal Penetrasyon - Yaş Bakteri								
Test Örneği 1 - Koloni Sayısı	kob	648	-	-	-	-	ISO 22610	(*) 154
Test Örneği 2 - Koloni Sayısı	kob	948	-	-	-	-	ISO 22610	(*) 154
Test Örneği 3 - Koloni Sayısı	kob	702	-	-	-	-	ISO 22610	(*) 154
Test Örneği 4 - Koloni Sayısı	kob	602	-	-	-	-	ISO 22610	(*) 154
Test örneği 5 - Koloni Sayısı	kob	721	-	-	-	-	ISO 22610	(*) 154
Test Örneği 1 - Bariyer İndeks	-	4,07	-	-	-	-	ISO 22610	(*) 154
Test Örneği 2 - Bariyer İndeks	-	3,86	-	-	-	-	ISO 22610	(*) 154
Test Örneği 3 - Bariyer İndeks	-	4,02	-	-	-	-	ISO 22610	(*) 154
Test Örneği 4 - Bariyer İndeks	-	3,97	-	-	-	-	ISO 22610	(*) 154
Test Örneği 5 - Bariyer İndeks	-	3,83	-	-	-	-	ISO 22610	(*) 154
Test Örneği 1 - Penetrasyon Yüzdesi	%	12,23	-	-	-	-	ISO 22610	(*) 154
Test Örneği 2 - Penetrasyon Yüzdesi	%	17,89	-	-	-	-	ISO 22610	(*) 154
Test Örneği 3 - Penetrasyon Yüzdesi	%	13,25	-	-	-	-	ISO 22610	(*) 154
Test Örneği 4 - Penetrasyon Yüzdesi	%	11,36	-	-	-	-	ISO 22610	(*) 154
Test Örneği 5 - Penetrasyon Yüzdesi	%	13,6	-	-	-	-	ISO 22610	(*) 154
Ortalama Penetrasyon Yüzdesi	%	13,66	-	-	-	-	ISO 22610	(*)
Bacillus atrophaeus Konsantrasyon	spor/mL	5,3*10 ³	-	-	-	-	ISO 22610	(*)
Patojen Penetrasyona Direnç								
Seçilen Prosedür	-	D	-	-	-	-	ISO 16604	(*) 155
Hidrostatik Basınç - 1	kPa	20	-	-	-	-	ISO 16604	(*)
Test Örneği 1	-	Başarılı	-	-	-	-	ISO 16604	(*) 157



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Mikrobiyoloji Laboratuvar Sorumlusu



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23/12/2020

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ANALİZ RAPORU

Rapor No. : 2030397E-R1

Rapor Tarihi : 23/12/2020

Müşterimiz tarafından teslim edilen numunede yapılan analiz sonuçları

Parametreler	Birim	Bulgu	Sınıf 1	Sınıf 2	Sınıf 3	LD Kaynağı	Metot	Bilgi
Hidrostatik Basınç - 2	kPa	20	-	-	-	-	ISO 16604	(*)
Test Örneği 2	-	Başarılı	-	-	-	-	ISO 16604	(*) 157
Hidrostatik Basınç - 3	kPa	20	-	-	-	-	ISO 16604	(*)
Test Örneği 3	-	Başarılı	-	-	-	-	ISO 16604	(*) 157
Test Öncesi Bakteriyofaj Titresi	pfu/mL	3,2*10 ⁸	-	-	-	-	ISO 16604	(*)
Test Sonrası Bakteriyofaj Titresi	pfu/mL	2,7*10 ⁸	-	-	-	-	ISO 16604	(*)
Negatif Kontrol	-	Başarılı	-	-	-	-	ISO 16604	(*)
Pozitif Kontrol	-	Başarısız	-	-	-	-	ISO 16604	(*)

Limit Değer Kaynağı : 104 El ve Kol Koruması ve Can Yeleği Dahil Koruyucu Kıyafetler (EN 14126)

Metot ISO : International Organization for Standardization

Bilgi

148 : Test örneği-1 sağ kol, test örneği-2 sol kol, test örneği-3 gövde kısmından örneklenmiştir. Verilen kalınlık ve kütle bu üç örneğe ait sonuçların ortalamasıdır.

149 : Tutucu elek, %50 açık alana sahiptir.

150 : Test Koşulları : 65±5 bağıl nem ve 20±2°C de koşullandırma yapıldı.
Etil alkol konsantrasyonunda ATCC 9372 Bacillus subtilis sporları kullanıldı.
200 mm x 200 mm 12 test parçası kullanıldı.
Vibratör dakikada 20800 titreşim frekansına sahip bir hava akışında çalıştırıldı.

151 : EN 14126 standardı Tablo 4'e göre Sınıf 2 değerlerini sağlamaktadır.

154 : Test Koşulları : 65±5 bağıl nem ve 20±2°C de 24 saat koşullandırma yapıldı.
Agar-petri ağzına kadar olan mesafe 3.0 mm'dir.
25 cm x 25 cm 5 test parçası kullanıldı.
Testler numunenin dış tarafından yapılmıştır.
ATCC 9372 Bacillus atropheus spor süspansiyonu kullanılmıştır.
İnkübatör Kontrol <4 kob
Test Ortam Kontrol <25 kob

155 : Test Koşulları : 20±2°C ve % 65±5 bağıl nemde minimum 24 saat
Örnek ebadı ve adedi : 75x75mm boyutunda 3 test örneği
Test mikroorganizmasının adı: ATCC 13706-B1 Escherichia coli bacteriophage Phi X174
PFU : Plak oluşturan birim

157 : Test örneği-1 sağ kol, test örneği-2 sol kol, test örneği-3 gövde kısmından örneklenmiştir.

R1: Raporda yapılan düzeltmeyi belirtir. 21/12/2020 tarihli ve 2030397E nolu raporumuz geçersizdir. Müşteri talebine istinaden marka bilgisi revize edilmiştir. İlgili rapor 2030397E-R1 olarak yeniden düzenlenmiştir.



Kübra HANCI AKAN

Mikrobiyoloji Laboratuvar Sorumlusu



Tasdik Olunur

23/12/2020

Ömer Yasin BALIK

Laboratuvar Müdürü



ÇEVRE
ENDÜSTRİYEL ANALİZ
LABORATUVARI



Test
TS EN ISO/IEC 17025
AB-0363-T

AB-0363-T

2030397E-R1

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ANALİZ RAPORU

Rapor No. : 2030397E-R1

Rapor Tarihi : 23/12/2020

Not

1. Talep edildiğinde uygunluk değerlendirmesi, yasal mevzuat ve standartlar veya müşteri ile mutabık kalınan karar kuralına göre uygulanır.
2. Analiz raporunda yer alan numuneye / örnelemeye ait tanımsal bilgiler müşteri tarafından beyan edilmiştir. Bu bilgilerin doğruluğundan ve kullanımına bağlı oluşabilecek tüm kayıplardan/yasal zorunluluklardan laboratuvarımız sorumlu değildir.
3. Bu analiz raporu laboratuvara gelen numuneyi / örnelemeyi temsil eder.
4. Bu rapor ve sonuçları Çevre Endüstriyel Analiz Laboratuvarı'nın izni olmadan ticari ve reklam amaçlı tamamen veya kısmen çoğaltılamaz veya yayınlanamaz.
5. Bu rapor Adli ve İdari işlemlerde kullanılamaz.
6. İmzasız Analiz Sonuç Raporları geçersizdir.
7. (*) İşaretli parametre akreditasyon kapsamımızda yer almaktadır.

Rapor Sonu

Kübra HANCI AKAN

Mikrobiyoloji Laboratuvar Sorumlusu

Tasdik Olunur

23/12/2020

Ömer Yasin BALIK

Laboratuvar Müdürü

Mikrobiyal Penetrasyon - Yaş Bakteri Analiz Raporu Eki (ISO 22610)										
Örnek No:		2030397E								
Analiz Sonuçları										
	Bacillus atrophaeus Spor Konsantrasyonu (spor/mL)	X1 (kob)	X2 (kob)	X3 (kob)	X4 (kob)	X5 (kob)	Z (kob)	Toplam Koloni Sayısı (kob)	% Pn	
		0-15 dakika	15-30 dakika	30-45 dakika	45-60 dakika	60-75 dakika				
Test Örneği - 1	5300	35	89	106	154	264	87	648	12,23	
Test Örneği - 2		54	96	213	281	304	63	948	17,89	
Test Örneği - 3		25	74	187	181	235	95	702	13,25	
Test Örneği - 4		40	70	120	163	209	74	602	11,36	
Test Örneği - 5		57	93	144	178	249	60	721	13,60	
X1: 1.plaka koloni sayısı										
X2: 2.plaka oloni sayısı										
X3: 3.plaka koloni sayısı										
X4: 4.plaka koloni sayısı										
X5: 5.plaka koloni sayısı										
Z: Ters test örneğindeki plaka sayısı										
Pn: Penetrasyon yüzdesi										
Toplam Koloni Sayısı = X1+X2+X3+X4+X5										
	T (kob)	CUM1	CUM2	CUM3	CUM4	CUM5	Bariyer İndex (EPP)	Donör (kob)	İnkübatör Kontrol (kob)	Ortam Test Kontrol (kob)
Test Örneği - 1	735	0,05	0,17	0,31	0,52	0,88	4,07	105	<4	<25
Test Örneği - 2	1011	0,05	0,15	0,36	0,64	0,94	3,86	120	<4	<25
Test Örneği - 3	797	0,03	0,12	0,36	0,59	0,88	4,02	100	<4	<25
Test Örneği - 4	676	0,06	0,16	0,34	0,58	0,89	3,97	140	<4	<25
Test Örneği - 5	781	0,07	0,19	0,38	0,60	0,92	3,83	113	<4	<25
T = Z + X1 + X2 + X3 + X4 + X5										
CUM1 = X1/T										
CUM2 = (X2 + X1)/T										
CUM3 = (X3 + X2 + X1)/T										
CUM4 = (X4 + X3 + X2 + X1)/T										
CUM5 = (X5 + X4 + X3 + X2 + X1)/T										

Ömer Yasin BALIK
Laboratuvar Müdürü



AB-0583-T

20045847

12-20

Müşterinin adı: UNIVERSAL SERTİFİKASYON VE GÖZETİM HİZMETLERİ TİCARET LTD.ŞTİ.
Adresi: NECİP FAZIL BULVARI KEYAP SİTESİ E2 ÜMRANIYE/İSTANBUL
Alıcı firma: DURUTEKS İNŞAAT GIDA TEKSTİL SANAYİ VE TİCARET LİMİTED ŞİRKETİ
İlgili kişi: SUAT KAÇMAZ
İstek numarası: -
Model numarası: DRT GOWN-L01
Numunenin adı ve tarifı: Mavi cerrahi önlük
Numunenin kabul tarihi: 04.12.2020
İlave numune ve/veya ilave bilgi geliş tarihi: -
Deneyin yapıldığı tarih: 04.12.2020-10.12.2020
Açıklamalar: -
Numune alımı: Bu raporda verilen sonuçlar müşteri tarafından gönderilen numuneye aittir.
Numunenin son kullanımı: -
Yıkama talimatı: Belirtilmedi.
Raporun sayfa sayısı: 8

Türk Akreditasyon Kurumu (TÜRKAK) deney raporlarının tanınması konusunda Avrupa Akreditasyon Birliği (EA) ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanınma antlaşmasını imzalamıştır. Deney laboratuvarı olarak faaliyet gösteren EKOTEKS LABORATUVAR ve GÖZETİM HİZMETLERİ A.Ş. TÜRKAK'tan AB-0583-T akreditasyon dosya numarası ile ISO 17025:2017 standardına göre akredite edilmiştir.

Deney ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metodları bu sertifikatta tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir



Tarih
10.12.2020

Müşteri Temsilcisi
Yeşim ŞAHİN

Laboratuvar Müdürü
Sevim A. RAZAK
10.12.2020

Bu rapor, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz.
İmza ve mühürsüz raporlar geçersizdir

**EKOTEKS LABORATUVAR ve GÖZETİM
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İSTENEN TESTLER	SONUÇ	AÇIKLAMA
FİZİKSEL TESTLER		
Aşınma	-	Sınıf 6
Su Geçirgenliği	-	Sınıf 6
Yırtılma Mukavemeti	-	Sınıf 1
Kopma Mukavemeti	-	Sınıf 1
Sıvılara Karşı İticilik	-	Sınıf 3
Sıvıların Nüfus Etmesine Karşı Direnci	-	Sınıf 3
Dikiş Mukavemeti	-	Sınıf 1
Delinme Dayanımı	-	Sınıf 1
Esnetme ile oluşan hasara karşı direncin Tayini	-	Sınıf 3
Yanmazlık	P	Sınıf 1
Antistatik ⁽¹⁾	F	Test sonucuna bakınız
P:Geçer F:Kalır R:Alıcı firmanın teknik kişisine başvurunuz. Test sonuçları BS EN 14325:2018'e göre sınıflandırılmıştır. (Referans Standart BS EN 14126 :2003 Enfekte Edici Ajanlara Karşı Koruyucu Giyecekler –Performans Özellikleri ve Deney Metotları) ⁽¹⁾ İstenen değerler müşteri tarafından belirtilmiştir		

Not: Aksi belirtilmediği takdirde testler ile ilgili kayıtlar 5 yıl, orjinal numuneler 3 ay saklanır. Müşteri tarafından talep edildiğinde testlere ait ölçüm belirsizliği raporlanır fakat "Geçer/Kalır" değerlendirmesinde ölçüm belirsizliği değeri dikkate alınmaz. Raporlanan belirsizlik, genişletilmiş belirsizlik olup standart belirsizlik kapsam faktörü k=2 kullanılarak elde edilmiştir. Güvenilirlik düzeyi % 95'tir. Uygunluk beyanı Basit Kabul Karar Kuralına göre verilmiştir. Bu raporda (*) işaretli deneyler akreditasyon kapsamına dahil değildir.



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TEST SONUÇLARI

Test Metodu: BS EN 14325:2018 (KİMYASALLARA KARŞI KORUYUCU GİYSİLER- KİMYASAL KORUYUCU GİYSİ MALZEMELERİNİN, DİKİŞLERİN VE BİRLEŞTİRİCİ MALZEMELERİN PERFORMANS SINIFLANDIRILMASI VE TEST METOTLARI)

AŞINMA DAYANIMI ve SIZDIRMAZLIK

Madde 4.4.Aşınma Dayanımı (EN ISO 12947-2) EK-B

Lissajous deseni oluşturan Martindale Test Cihazı (47.5±2 rpm)

9 kPa basınç, (595±7) g kütle.

Kondüsyon şartlarında test edilmiştir.(20±2°C-65%±4)

SONUÇ

Aşınmadı @ 2000 devir

SINIF

6

Tablo-1 'e göre yapılır

Malzemeye zarar vermeyen en yüksek aşınma devri Tablo-1 e göre tayin edilir.

Aşınma Dayanımının Sınıflandırılması (Tablo-1)

<i>Sınıf</i>	<i>Devir Sayısı</i>
6	>2000
5	>1000
4	>400
3	>100
2	>40
1	>10

Madde 4.4.2.3 Su geçirmezlik tayini hidrostatik basınç metodu (EN 20811)

Orijinal numune (aşındırılmamış) test sonucu > 200 mmSS olmalıdır.Bunu sağlarsa madde 4.4'e göre en yüksek devirde bulunan numuneye EN 20811 uygulanır.

SU GEÇİRGENLİĞİ; EN ISO 20811:2018

Hidrostatik Başlık Cihazı, Textest marka Fx 3000 model

Su sıcaklığı 10 .°C. Basınç artış oranı 10 mbar/dk.

Kondüsyonlu ortamda test edilmiştir. (20±2°C-65%±4).

Numune 1

Numune 2

Numune 3

Numune 4

Ortalama

SONUÇ

603.8 mm SS

636.5 mm SS

567.2 mm SS

592.6 mm SS

599.8 mm SS

İSTENEN

>200 mmSS

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TEST SONUÇLARI

YIRTILMA MUKAVEMETİ;

Madde 4.7.Trapezoidal Yırtılma Dayanımı TS EN ISO 9073-4:2002

Instron 5969 Hız: 100 mm/dk±10, Çene mesafesi 5 cm.

En boy yönlerinde 4 adet sonucun ortalaması verilmiştir.

2N Ön gerilim uygulanmıştır.

Kondüsyon şartlarında test edilmiştir. (20±2°C - %65±4)

SONUC

EN 18.5 N

BOY 38.6 N

SINIF

1

Tablo-4 'e göre yapılır

Yırtılma Dayanımının Sınıflandırılması (Tablo-4)

Sınıf	Yırtılma Mukavemeti
6	>150 N
5	>100 N
4	>60 N
3	>40 N
2	>20 N
1	>10 N

KOPMA MUKAVEMETİ;

Madde 4.9.Kopma Mukavemeti EN ISO 13934-1:2013

Hız: 100 mm/dk±10, Çene mesafesi 200 mm.

Ön gerilme uygulanmamıştır. Islatma işlemi yapılmamıştır.

Atkı ve Çözümlü yönlerinde 4 adet sonucun ortalaması verilmiştir.

Kondüsyon şartlarında test edilmiştir. (20±2°C - %65±4)

SONUC

EN 36.7 N

BOY 67.6 N

SINIF

1

Tablo-5 'e göre yapılır

Kopma Mukavemeti Sınıflandırılması (Tablo-5)

Sınıf	Kopma Mukavemeti
6	>1000 N
5	>500 N
4	>250 N
3	>100 N
2	>60 N
1	>30N

TEST SONUÇLARI SIVILARA KARŞI İTİCİLİK ÖZELLİĞİ

Madde 4.12 Sıvılara Karşı İticilik (EN ISO 6530:2005)

Sıvı dayanımı Tablo-9 da verilen sıvı kimyasallar yada genel amaçlı bir izlenimi görmek için test sıvısı olarak su da kullanılabilir. Kondüsyon şartlarında test edilmiştir. ($20 \pm 2^\circ\text{C}$ - $\%65 \pm 4$)
Test edilecek herbir kimyasal sıvıya dayanımı ölçmek için 3 en. 3 boy numune (360 ± 2)mm x (235 ± 5)mm alınmıştır. Analitik saflıkta kimyaal kullanılmıştır. Test sıvısı (10cm^3), (10 ± 1)s de numune yüzeyinden geçirilmiştir. Bkz Tablo-9
Sonuç Değerlendirmesi Tablo-10 ve tbalo-11'e göre yapılmıştır.

Absorbsiyon, Penetrasyon (nüfuz etme) ve iticilik testlerinde kullanılan kimyasallar (Tablo-9)

Kimyasal	Kimyasal Marka	% Konsantrasyon	Sıcaklık ($\pm 2^\circ\text{C}$)
Sülfürik Asit (H_2SO_4)		30	20
Sodyum Hidroksit (NaOH)		10	20
o-Xylene		Seyreltik değil	20

Sıvı İticiliğinin Sınıflandırılması (Tablo-10)

Sınıf	İticilik İndeksi (I_R)
3	$> 90 \%$
2	$> 80 \%$
1	$> 70 \%$

Madde 4.13 Sıvıların Nüfus Etmesine Karşı Direnci (EN ISO 6530)

Sıvılara Karşı Nüfus Etme Direncinin Sınıflandırılması (Tablo-11)

Sınıf	Nüfus Etme İndeksi (I_p)
3	$< 1 \%$
2	$< 5 \%$
1	$< 10 \%$

SONUC

Kimyasal	% Konsantrasyon	I_p	Sınıf	I_R	Sınıf
Sülfürik Asit (H_2SO_4)	30	$\% 0$	3	$\% 96.58$	3
Sodyum Hidroksit (NaOH)	10	$\% 0$	3	$\% 95.20$	3
o-Xylene	Seyreltik değil	$\% 0$	3	$\% 65.66$	3

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TEST SONUÇLARI

DİKİŞ MUKAVEMETİ-GRAB METOT ;

Madde 5.5 Dikiş Mukavemeti ISO 13935-2: 2014

NSTRON 5969

Hız: 50±5 mm/dk, Çene Aralığı: 100 ±1 mm

5kN yük uygulanmıştır.

Kondüsyon şartlarında test edilmiştir.(20±2°C-65%±4)

	<u>Dikiş Mukavemeti (N)</u>	<u>Hata</u>	<u>SINIFLANDIRMA</u>
Kol dikişi	52.6 N	FTJ	Sınıf I
Kol evi	52.8 N	FTJ	
Bağcık	39.4 N	FTS	

FTJ : Çenede Kumaş Yırılması

FTS : Dikişte Kumaş Yırılması

Dikiş Mukavemeti Sınıflandırılması (Tablo-13)

SINIF	Dikiş Mukavemeti
6	>500 N
5	>300 N
4	>125 N
3	>75 N
2	>50 N
1	>30 N

Gen.f136-1/03

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TEST SONUÇLARI

DELİNME DAYANIMI

Madde 4.10.Delinme Dayanımı EN 863 : 1995

SONUÇ

5.8 N

SINIF

Sınıf 1
Tablo-6 'ya göre
yapılır

Delinme Dayanımının Sınıflandırılması (Tablo-6)

<i>Sınıf</i>	<i>Delinme Dayanımı</i>
6	>250 N
5	>150 N
4	>100 N
3	>50 N
2	>10 N
1	>5N

YÜZEY ÖZ DİRENCİ ÖLÇÜMÜ; EN 1149-1:2006

Ohm metre (Static Lab Tester-Mesdan 291B) kullanılmıştır.
Müşteri isteği ile, numune alındığı hali ile test edilmiştir.

Ön İşlem
Kondüsyonlama ve test koşulları (23± 1)°C, (25± 5)%RH
Kondüsyonlama süresi ≥ 24 saat
Uygulanan Voltaj - 100 Volt
Test edilen numune sayısı 5

Ölçüm

1
2
3
4
5

Geometrik Ortalama

Yüzey Direnci

9.09 x 10¹⁰ Ohms
9.09 x 10¹⁰ Ohms
9.09 x 10¹⁰ Ohms
9.09 x 10¹⁰ Ohms
9.09 x 10¹⁰ Ohms
9.09 x 10¹⁰ Ohms

SONUÇ

Yüzey Öz Direnci

1.79 x 10¹² Ohms
1.79 x 10¹² Ohms
1.79 x 10¹² Ohms
1.79 x 10¹² Ohms
1.79 x 10¹² Ohms
1.79 x 10¹² Ohms

İSTENEN
<2.5 x 10⁹ Ω

Öz Direnç şu şekilde hesaplanır: $\rho = k \times R$ ve $k = 19.8$

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TEST SONUÇLARI

ESNETME İLE OLUŞAN HASARA KARŞI DİRENCİN TAYİNİ METOT C(*) (BÜKÜLME /ESNEKLİK TESTİ) Madde 4.5

Test Metodu : ISO 7854 :1995 Kauçuk veya Plastik Kaplı Kumaşlar –

Esnetme ile oluşan hasara karşı direncin tayini Metot C (Bükülme /Esneklik Test) (*)

220 mm boy x 190 mm en ebatlarında 2 numune hazırlanır.

Devir tamamlanınca varsa hasar tespit edilir ve sınıflandırma Tablo 2 ye göre yapılır.

SONUC

>5 000devir

Hasar gözlenmemiştir.

SINIF

Sınıf 3

Tablo-2' e göre yapılır

Tablo-2 Bükülme ve Esneklik Direncinin Sınıflandırılması

Sınıf	Devir Sayısı
6	> 100 000
5	>40 000
4	> 15 000
3	> 5 000
2	> 2 500
1	> 1000

YANMAZLIK ;

BS EN 14325:2018 Madde 4.14 (Tutuşmaya Karşı Dayanım)
(Ref: BS EN 13274-4:2001(*)- METOT 3

Kondüsyonlama	65±5 % RH, 20±2°C/24 saat
Test Atmosferi	16-32° (±1°C)
Alev Yüksekliği	40± 2 mm
Gaz Tipi	Propan (min %95 saflıkta)
Alev Sıcaklığı	800±50°C
Test Edilen Numune Boyutu	560 x 170 mm (boy x en)
Numune Hareket Hızı	60 ± 5 mm/s.

SONUÇ LEVEL 1

GEÇTİ

Customer name: UNIVERSAL SERTİFİKASYON VE GÖZETİM HİZMETLERİ TİCARET LTD.ŞTİ.
Address: NECİP FAZIL BULVARI KEYAP SİTESİ E2 ÜMRANIYE/İSTANBUL
Buyer name: DURUTEKS İNŞAAT GIDA TEKSTİL SANAYİ VE TİCARET LİMİTED
ŞİRKETİ
Contact Person: SUAT KAÇMAZ
Order No: -
Article No: DRT GOWN-L01
Name and identity of test item: Blue surgical gown
The date of receipt of test item: 04.12.2020
Re-submitted/re-confirmation date: -
Date of test: 04.12.2020-10.12.2020
Remarks: -
Sampling: The results given in this report belong to the received sample by vendor.
End-Use: -
Care Label: Not Specified
Number of pages of the report: 8

The Turkish Accreditation Agency (TÜRKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of test reports.

EKOTEKS LABORATUVAR ve GÖZETİM HİZMETLERİ A.Ş. accredited by TÜRKAK under registration number [AB-0583-T] for ISO 17025:2017 as test laboratory.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.



Date
10.12.2020

Customer Representative
Yeşim SAHİN

Head of Testing Laboratory
Sevim A. RAZAK
10.12.2020

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REQUIRED TESTS	RESULT	COMMENTS
PHYSICAL PROPERTIES TESTS		
Abrasion	-	Class 6
Water Permeability	-	Class 6
Tear Strength	-	Class 1
Tensile Strength	-	Class 1
Repellency to Liquids	-	Class 3
Resistance To Penetration By Liquids	-	Class 3
Seam Strength	-	Class 1
Puncture Resistance	-	Class 1
Determination of resistance to damage by flexing	-	Class 3
Flammability	P	Class 1
Surface Resistivity ⁽¹⁾	F	See test results
P: Pass F: Fail R: Refer to retailer technologist Tests were classified according to BS EN 14325:2018 BS EN 14126 :2003 Protective clothing —Performance requirements and tests methods for protective clothing against infective agents ⁽¹⁾ Requirement was given by the vendor		

REMARK: Original samples are kept for 3 months and all technical records are kept for 5 years unless otherwise specified. If requested, measurement uncertainty will be reported. But unless otherwise specified, measurement uncertainty is not considered while stating compliance with specification or limit values. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95 %. The declaration of conformity was given in accordance with the Simple Acceptance Decision Rule. Tests marked (*) in this report are not included in the accreditation schedule.



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TEST RESULTS

Test Method : BS EN 14325:2018 (PROTECTIVE CLOTHING AGAINST CHEMICALS:TEST METHODS AND PERFORMANCE CLASSIFICATION OF CHEMICAL PROTECTIVE CLOTHING MATERIALS,SEAMS,JOINS AND ASSEMBLAGES

ABRASION RESISTANCE AND LEAK TIGHTNESS

Clause 4.4.Abrasion Resistance (EN ISO 12947-2) ANNEX-B

Martindale Test Machine (47.5±2 rpm) with Lissajous Figure.

9 kPa pressure,

Performed in the conditioned room (20±2°C-65%±4).

RESULT

No abrasion @2000 revs

CLASS

6

Classified according to the
Table-1

Determination of the highest number of abrasion rubs which does not cause damage to the material and which shall be used for the performance classification.

The abrasion resistance of sample shall be Classified according to the levels of performance given in Table-1

Table-1 Classification of Abrasion Resistance

Class	Number of rubs
6	>2000
5	>1000
4	>400
3	>100
2	>40
1	>10

Clause 4.4.2.3 Hydrostatic head end –point determination (EN 20811)

If the average hydrostatic head exceeds 200mm,then the hydrostatic head method is applicable and the leak tightness shall be determined.

WATER PERMEABILITY ; EN ISO 20811:2018

Hydrostatic Head Tester, Textest marka Fx 3000 model

Temperature of water 10.°C. Pressure increase ratio 10 mbar/dk.

Performed in the conditioned room (20±2°C-65%±4)

Sample 1
Sample 2
Sample 3
Sample 4

Average

RESULT

603.8 mm SS
636.5 mm SS
567.2 mm SS
592.6 mm SS

599.8 mm SS

REQUIREMENT

>200 mmSS

TEST RESULT

TRAPEZOIDAL TEAR STRENGTH

Clause: 4.7. Trapezoidal Tear Resistance TS EN ISO 9073-4:2002

Instron 5969 Speed: 100±10 mm/min. Gauge length: 5cm

The average results are given for width and length direction of five samples.

2 pre-tension applied

Performed in the conditioned room. (20±2°C - 65%±4)

Width **RESULT**
18.5 N

Length 38.6 N

CLASS

1
Classified according to
the Table-4

Table-4 Classification of Trapezoidal Tear Resistance

Class	Tear Strength
6	>150 N
5	>100 N
4	>60 N
3	>40 N
2	>20 N
1	>10 N

TENSILE STRENGTH

Clause 4.9. Tensile Strength EN ISO 13934-1:2013

Instron 5969 (Load: 50 kN), Strip Method.

Speed: 100 mm/min±10, Gauge length 200 mm.

Pre-load was not applied. Without wetting samples.

The average results are given for width and length direction of five samples.

Performed in the conditioned room (20±2°C-65%±4).

Width **RESULT**
36.7 N

Length 67.6 N

CLASS

1
Classified according to
the Table-5

Table-4 Classification of Tensile Strength

Class	Tensile Strength
6	>1000 N
5	>500 N
4	>250 N
3	>100 N
2	>60 N
1	>30N

TEST RESULT REPELLENCY TO LIQUIDS

Clause 4.12 Repellency to Liquids (EN ISO 6530:2005)

When tested in accordance with EN ISO 6530 for repellency to the liquid chemicals given in Table -9, the material shall be classified According to the levels performance in given Table-10 for each chemical tested.
Use those liquids against which protection is required, water is also convenient and safe liquid for general screening purposes.
Performed in the conditioned room ($20 \pm 2^\circ\text{C}$ - $65\% \pm 4$).

For each test liquid ,cut six test specimens of (360 ± 2)mm by (235 ± 5)mm from the sample.
Chemicals shall be of analytical purity grade.
Discharged the test liquid (10cm 3) within (10 \pm 1)s

Table-9 List of reference chemicals for absorption ,penetration and repellency testing

Chemical	Concentration weight %	Temperature of chemical ($\pm 2^\circ\text{C}$)
Sulfuric Acid (H ₂ SO ₄)	30	20
Sodium Hydroxide (NaOH)	10	20
o-Xylene	Undiluted	20

Table 10- Classification of Repellency to liquids

Class	Repellency Index (I_R)
3	> 90 %
2	>80 %
1	>70 %

Clause 4.13 Resistance to penetration by liquids (EN ISO 6530)

Table 11- Classification of Resistance to penetration by liquids

Class	Penetration Index (I_p)
3	< 1 %
2	< 5 %
1	<10 %

RESULT

Chemical	Concentration weight %	I_p	Class	I_R	Class
Sulfuric Acid (H ₂ SO ₄)	30	0%	3	% 96.58	3
Sodium Hydroxide (NaOH)	10	0%	3	%95.20	3
o-Xylene	Undiluted	0%	3	%65.66	3

I_p : index of penetration
 I_R : index of repellency
 I_A : index of absorption

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TEST RESULT

SEAM STRENGTH-GRAB METHOD

Clause 5.5 Seam Strength ISO 13935-2: 2014

Jaw Speed: 50±5 mm/min, Gauge Length: 100 mm±1 mm.

Seam Type : 301. 100 % Polyester core-spun sewing-thread was used.

5kN. Load was applied.

The average results are given for width and length direction of five samples.

Performed in the conditioned room(20±2°C-65%±4)

	<u>Seam Strength (N)</u>	<u>Fail</u>	<u>CLASS</u>
Sleeve seam	52.6 N	FTJ	Class 1
Armhole	52.8 N	FTJ	
Cord	39.4 N	FTS	

FTJ : Fabric Tear At Jaw

Table 13- Classification of Seam Strength

<u>CLASS</u>	<u>Seam strength</u>
6	>500 N
5	>300 N
4	>125 N
3	>75 N
2	>50 N
1	>30 N

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TEST RESULT

PUNCTURE RESISTANCE

Clause 4.10.Puncture Resistance EN 863

RESULT

5.8 N

CLASS

1

Classified according to
the Table-6

Table-4 Classification of Puncture Resistance
(Tablo-6)

Class	Puncture Resistance
6	>250 N
5	>150 N
4	>100 N
3	>50 N
2	>10 N
1	>5N

SURFACE RESISTIVITY; EN 1149-1:2006

Ohm meter (METRISO 3000) was used.

Original sample was tested as the client's request

Pre-Treatment

Atmosphere for conditioning and testing (23± 1)°C, (25± 5)%RH

Conditioning time ≥ 24 hours

Applied voltage - 100 Volt

Number of samples tested 5

Measurement

1

2

3

4

5

Geometrical Mean

Surface Resistance

9.09 x 10¹⁰ Ohms

9.09 x 10¹⁰ Ohms

9.09 x 10¹⁰ Ohms

9.09 x 10¹⁰ Ohms

9.09 x 10¹⁰ Ohms

9.09 x 10¹⁰ Ohms

RESULT

Surface Resistivity

1.79 x 10¹² Ohms

1.79 x 10¹² Ohms

1.79 x 10¹² Ohms

1.79 x 10¹² Ohms

1.79 x 10¹² Ohms

1.79 x 10¹² Ohms

REQUIREMENT

<2.5 x 10⁹ Ω

The resistivity is calculated by: $\rho = k \times R$, and $k = 19.8$

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TEST SONUÇLARI

DETERMINATION OF RESISTANCE TO DAMAGE BY FLEXING METHOD C (CRUMPLE/FLEX) (*)
Test Metot : ISO 7854 :1995 Rubber- or plastics-coated fabrics -Determination of resistance to damage by flexing Method C (Crumple /Flex Test) (*)Clause 4.5

Two test pieces were prepared each 220 mm long x 190 mm width
After cycle has finished examine the damage of samples and classified

RESULT

>5 000 cycles

CLASS

Class 3
Classified according to
the Table-2

No damage observed

Table 2-Classification of flex cracking resistance

Class	Number of cycles
6	> 100 000
5	>40 000
4	> 15 000
3	> 5 000
2	> 2 500
1	> 1000

FLAMMABILITY ;

Clause 4.14. Flammability Resistance EN 13274-4:2001(*)- Method 3

Conditioning	65±5 % RH, 20±2°C/24 hours
Test atmosphere	10-30° (±1°C)
Flame height	40± 2 mm
Gas type	Propane
Flame temperature	800±50°C
Sample size tested	105 x 50mm
Test result	LEVEL 1

RESULT PASS

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