





# Polypropylene spunbond nonwovens

TESSITURE PIETRO RADICI (TPR) is the ancestral company of today's Radici-Group. TPR has been in operation since 1941. Since the end of the 1980's, it has produced the Dylar® line of spunbond nonwovens which are specifically designed and developed for needs of various application sectors.



TPR is member of the European Association for the Nonwovens industry EDANA.



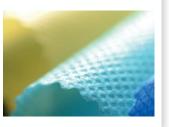
#### **BRAND**



Dylar® is the brand name for polypropylene spunbond nonwovens manufactured by TPR. The Dylar® family includes a complete range of products offering a wide choice of weights, widths and additives.







#### **MARKETS**

#### **AUTOMOTIVE**

Dylar® Thermoresistant Dylar® Low VOC emissions

#### **HYGIENE & MEDICAL**

Dylar® Super Absorbent Dylar® Soft (PE)

#### **FILTRATION**

Dylar® Elongation Dylar® Air Permeability

#### **AGRICULTURE**

Dylar® UV High Resistance at low weight Dylar® Pesticides Resistant Dylar® Super Absorbent Dylar® Soft (PE)

#### PROTECTING APPAREL

Dylar® Antistatic Dylar® Tear Resistant Dylar® High Tech Puncture Resistant

#### **ROOFING**

Dylar® UV Resistant Dylar® Electroshield Dylar® Flame Retardant Dylar® High color fastness Antimosquitos & Mold

#### **FURNITURE**

Dvlar® Antibacterical Dylar® Antistatic Dylar® Food Approval (EU Standard)

OHSAS 18001

# **Dylar® Spunbond Process Certifications**

#### **UNI EN ISO 9001**



#### **UNI EN ISO 14001**









# Polypropylene spunbond nonwovens for Automotive

**TESSITURE PIETRO RADICI (TPR)** is a well known European manufacturer of polypropylene spunbond nonwovens for technical applications such as roofing membranes, automotive interior and exterior, furniture, packaging and agriculture.

**DYLAR**® spunbond is a nonwoven fabric that is comprised of filaments arranged in a random manner and thermally bonded using a calendering process.

DYLAR® spunbond is available in weights from 12 to 150 gr/m2 and in a wide range of colours and tailor made technical properties.



# **FOCUS ON INNOVATION**

The automotive industry is one of the largest users of "engineered non-woven fabrics". Nonwovens cover approximately 3,7 sqm per vehicle, very often in non visible parts. This is a very demanding industry that requires: new materials, different technical usages, low cost and performing solutions.

#### **STRENGHTS**

- Lightweight
- Good structural / engineering properties
- Versatility
- High mechanical characteristics over time

# **FOCUS ON INNOVATION**

#### **AUTOMOTIVE INTERIOR**

#### **DYLAR® FEATURES**

- High Tensile strength
- Functionality at hot, cold and humid conditions
- Good Folding behavior



#### **AIRBAG ENVELOPE**

# **SEAT SPRING COVER**

# **DYLAR® FEATURES**

- Lightweight and strong
- Functionality at hot, cold and humid conditions
- High Tensile strength



# **SEAT COVER**

#### **DYLAR® FEATURES**

- High Tensile strength
- Lightweight and strong
- Hydrophobic



# **AUTOMOTIVE EXTERIOR**

#### **INSULATION ACOUSTIC CONTROL**

# **DYLAR® FEATURES**

- Readily sewn, seamed, coated, dyed and laminated
- Lightweight and strong
- Functionality at hot, cold and humid conditions

# CAR COVER DYLAR® FEATURES

- High Tensile strength
- UV resistance properties
- Wide range of colours







Polypropylene spunbond nonwovens specialties

# **High Technical Properties**

**Tensile Strength** is the maximum stress that a material can withstand while being stretched or pulled before failing or breaking.



**Isotropy** is uniformity in all orientations, both Cross Direction (CD) and Machine Direction (MD).

In standard spunbond PP nonwovens MD > CD



DYLAR® PP spunbond performance can reach: MD/CD=1

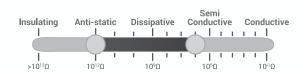
# **Antistatic**

**DYLAR® PP spunbond AS** prevents or inhibits the buildup of static electricity.

As requested by the different application sectors, **DYLAR® PP spunbond AS** can either be:

Anti-Static (Dylar® surface resistance 1x1012 ohms/square)

Dissipative (Dylar® surface resistance 1x106 ohms/square)



# Flame retardant

**DYLAR® Flame Retardant PP spunbond** can prevent fires from starting or limit the spread of fire and minimize fire damage.



#### DIN 75200 ( AUTOMOTIVE)

Determination of burning behaviour of interior materials in motor vehicles.



#### EN ISO 11925 (ROOFING/BUILDING)

Reaction to fire tests - Ignitability of building products subjected to direct impingement of flame.



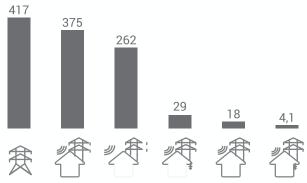
#### FIRA International Ltd (FURNITURE)

Furniture Industry Research Association Certification: Schedule 4 Part II & Schedule 5 Part III.

# **Electroshields**

**DYLAR® PP Electroshields** is a laminate, developed in customer partnership, whose main feature is the shielding that it provides against electric waves. Each of its constituent layers performs a specific function.

#### What does DYLAR® PP Electroshield do?



Electric field intensity \*(V/m)

**Electroshield** is individually capable of abating up to 30% of field lines. When the product is properly grounded, a reduction of over 90% can be achieved.

# A-UV

**UV degradation** occurs when nonwovens are exposed to the influence of sunlight, rain, temperature, and oxygen.

This type of degradation is caused primarly by the UV content of sunlight, which initiates the photo-oxidation process.

