Specialty Fibres for a range of applications
Thai Acrylic Fibre Co., Ltd. is one of the largest acrylic fibre companies in the world. Incorporated in 1987, the company produces a range of acrylic and specialty acrylic fibres for various end-applications including sweaters, outerwears, innerwears, base-layers, home-textiles, and technical textiles. We are certified with many global level standards.
<table>
<thead>
<tr>
<th>No.</th>
<th>Fibre Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Amicor™</td>
<td>High-performance anti-microbial fibre, which performs up to 100 washes</td>
</tr>
<tr>
<td>02</td>
<td>Pilblock™</td>
<td>Engineered innovated anti-pilling fibre, which performs until life of the garments with soft hand-feel</td>
</tr>
<tr>
<td>03</td>
<td>Radianza™</td>
<td>Eco-friendly ready-to-use fibre, which can save water up to 30 litres to produce one sweater</td>
</tr>
<tr>
<td>04</td>
<td>Warmos™</td>
<td>Bi-conjugate fibre, which gives very bulky and high keep warm performance with hand-feel close to wool</td>
</tr>
<tr>
<td>05</td>
<td>Tropix™</td>
<td>Cotton-like with high UPF protection</td>
</tr>
</tbody>
</table>
TRENDS & FACTS

The fitness industry today is a multi-trillion-dollar industry linked with clothing, food, drinks, equipment, and gyms.

Healthy | Lifestyle | Pandemic

The health and fitness industry is one of the world’s largest and fastest-growing industries today with an estimated global value of 3.7 trillion and double-digit annual growth since 2010.

In 2014, nearly 40% of adults were considered overweight. In the United States, that number jumps to 70%, making it the most overweight country in the world. Millennials and Gen Z’ers are also more stressed out than previous generations.

Social media has fully infiltrated the global fitness industry for better and worse, but both sides of this impact have led to a rise in exercise and activity.

While the global coronavirus pandemic completely shut the private fitness industry down for a period, it actually created a new window of opportunity for health and fitness in the form of the home workout.

Sources:
https://www.lightspeedhq.com/blog/how-health-fitness-became-trillion-dollar-industry/
https://www.womensportreport.com/why-has-the-popularity-of-exercise-increased/359
• A specialty anti-microbial fibre
• Specifically engineered to incorporate additives into the core of fibre
• Amicor™ promises durable & long lasting anti-microbial function up to 100 washes
• Can be blended to be used at between 20% and 30% of the composition of the article
• Can be converted into products by all conventional techniques- yarn spinning, nonwoven processes
Key Benefits of Amicor™

- Anti-Bacterial
- Anti-viral
- Anti-Fungal
- Durable, Long Lasting Action
- Gentle, Safe and Soft
- Applicable to All Textile Applications
- Quality Assured
- Clearly Branded and Identified
- Worldwide Marketing Support
- Dyeable to brightest and most Delicate shades

Applications
- Innerwear/active wear
- Kidswear
- Denim
- Hospital Uniform
- Socks
- Home Textiles eg. Bedding and Carpet

Denier and Cut Length Available
- 1.5D, 3.0D
- 38mm, 52mm, 64mm, Tow
Pilling – a major issue in synthetics

• Pilling is a major problem with synthetic fibers

• Due to pilling, the garments lose their new look and people eventually discard the garment.

• Impact on customer experience, loyalty and brand-value
High pilling grade (pilling grade 4-4.5 in ICI Pill Box Test)*

- New look even after prolonged use/washing. Lasts for lifetime
- Soft touch, excellent wearer comfort
- Lighter in weight w.r.t. cotton, polyester, silk, etc.
- Cashmere-like special super-soft touch even in yarn died varieties
- Versatile textile applications, can be blended with any natural and synthetic fibres

*Pilling grade also depends on Yarn Twist, Fabric Construction & Blends
Applications
Innerwear/active wear/base layer
Sweaters
Beanies/winter accessories
Hand knitting yarns

Denier and Cut Length Available
0.9D, 1.2D, 1.5D, 2.0D
38mm, Tow
The fashion industry has a disastrous impact on the environment. In fact, it is the second largest polluter in the world, just after the oil industry. And the environmental damage is increasing as the industry grows.

**Fashion's Environmental Impact**

**The Key Problem**
- Water Pollution | Water Consumption
- Global Warming | Chemicals | Energy Consumption

**Fashion & Water Pollution**
- 20% of industrial, water pollution comes from textiles treatment and dying
- 200,000 tons of dyes are lost to effluents every year
- 90% of wastewaters in developing countries is discharged into rivers without treatment

**Fashion & Water Consumption**
- 1.5 trillion litres of water are used by the fashion industry each year
- 200 tons of fresh water are needed to dye one ton of fabric
- 750 million people in the world do not have access to drinking water

*Source: World Bank*
Radianza™ is produced from gel-dyed technology, which is sustainable in term of production process. Using Radianza™ to produce one sweater:

- requires ~30 litres less water than a similar sweater made with regular fibre
- ~1.45 kg less CO2 equivalent Global Warming Potential
- Consumes ~25 MJ less Energy
- ~3/4th of the kg SO2 equivalent Human Toxicity Potential

Ready-to-use fibre
Applications
Sweaters/cardigan
Winter Accessories
Fleeces
Innerwear/active wear/base layer
Socks
Trousers
Home Textiles eg. pillow case, carpet

Denier and Cut Length Available
1.2, 1.5D, 2.5D, 3.0D
38, 51, 64mm & Tow form
• Studies indicate sweaters with Warmos™, in specific blends with acrylic, give similar CLO value as Wool sweaters.
• CLO value indicates the amount of thermal insulation and hence a measure of the thermal comfort of the wearer.
• Warmos™ provides Comfort & Feel of Wool and is perfect for a cozy winter.
• More Round, Lofty and Bulky Yarn
• Wool Like Spiral Crimp and Hand Feel.
• Use of 35-40% in blend is enough to get that feel.
• High Covering Property
• 3-Tier Effect on Yarn with Shrinkable Conjugate Type
Applications
Sweaters
Winter Accessories
Fleeces
Base layer
Denim
Socks

Denier and Cut Length Available
3.0D
38mm, 64mm, Tow form
COVID-19 increased outdoor activities
People in the study—who ranged from stuck at home to stressed in essential worker jobs—reported significant increases in outdoor activity during COVID-19, especially among women.

Activities in outdoor during pandemic
Outdoor activities seeing the largest increases were: watching wildlife (up 64%), gardening (57%), taking photos or doing other art in nature (54%), relaxing alone outside (58%), and making their masked and distanced way on walks (70%).

Consumers care about sun protection
A recent GCI post from August 2020 presents a sunscreen market projection by Allied Market Research of US $2.9 billion by 2026, with a CAGR of 3.7% between 2019 and 2026.

Source:
https://www.uvm.edu/gund/news/pandemic-people-are-turning-nature-especially-women
Tropix™ is a cotton-look acrylic fibre.

With Tropix™, one can ensure that the garments look like cotton, feel like cotton but at the same time have better and brighter dye shades as compared to cotton.

Tropix™ fibre has inherent high Ultraviolet Protection Factor (UPF) which gives it an added advantage for summer apparel.
Sweaters/cardigan
Winter Accessories
Fleeces
T-shirt

Applications
1.5D, 2.0D
38mm, Tow form
CONTACT US

Thai Acrylic Fibre Co. Ltd
Mahatun Plaza, 16th Floor, 888/168-169
Ploenchit Road, Bangkok 10330, Thailand
Email: marketing.taf@adityabirla.com