Toraysee®

Cleaning Cloth
for Industrial Application
The cleaning cloth, Toraysee®, of micro fiber produced by TORAY’s polymer chemistry and fiber processing technology is excellent in cleaning power. The types for clean room use are also excellent in cleanliness thanks to special fusion cutting and ultra pure water cleaning and are useful for customers to improve quality and productivity. Several permanent specifications and sizes by types are available. Please contact for customized products in specifications such as roll forms and special sizes.

**Cleaning power**

Oil films, dust and fine dirt are only expanded and cannot be completely wiped away with cloth of popular fibers. Toraysee’s micro fibers contact the surface to take dirt into the micro pockets of the fibers and show excellent wiping performance (inner trap function).

**Cleaningliness**

Toraysee® is a cleaning cloth of fabric or knitted type, and no fibers come off the cloth. Products for clean room use are fusion-cut, cleaned with ultra pure water and packaged in the special processing environment exclusively for wipers.

- **Ultra pure water cleaning and fusion-cut**
  ① Toraysee is cleaned with ultra pure water and packaged in the special processing environment exclusively for wipers.
  ② Toraysee is fusion-cut to prevent dust from being raised from the cut surface

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<table>
<thead>
<tr>
<th>Popular cloth (Nylon)</th>
<th>Toraysee®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester islands-in-the-sea type</td>
<td>Polyester/Nylon split-type</td>
</tr>
</tbody>
</table>

**Popular fiber/approx. 15μm in diameter**

**Toraysee micro fiber (approx. 2μm in fiber diameter)**

**Photographs before and after wiping**

**Blank**

- **Cleaning**
- **Cutting**

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Chemical resistance

Toraysé® can be used together with popular organic solvents.

<table>
<thead>
<tr>
<th>Organic chemicals</th>
<th>Safety</th>
<th>Acid/Alkali</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>☑</td>
<td>95% sulfuric acid (Concentrated sulfuric acid)</td>
<td>×</td>
</tr>
<tr>
<td>Ethanol</td>
<td>☑</td>
<td>60% nitric acid (Concentrated nitric acid)</td>
<td>×</td>
</tr>
<tr>
<td>IPA</td>
<td>☑</td>
<td>15.5% hydrochloric acid (Concentrated hydrochloric acid)</td>
<td>×</td>
</tr>
<tr>
<td>Acetone</td>
<td>☑</td>
<td>20% ammonia solution</td>
<td>☑</td>
</tr>
<tr>
<td>MEK</td>
<td>☑</td>
<td>40% sodium hydroxide</td>
<td>×</td>
</tr>
</tbody>
</table>

Determination: Room temperature of 15°C, Impregnation for 10 minutes

☑ : Stable  × : May be dissolved

Product conforming to RoHS

1. "Product conforming to RoHS" in this brochure means that no cadmium, lead, mercury, chromium sexivalent, PBB nor PBDE are contained excepting impurities at the natural level and that no additives are included intentionally according to EU Directive 2002/95/EC.

2. This does not guarantee that product conforms to laws and regulations in each country of EU in accordance with RoHS.

Example of use

Clean Toraysé® of high wiping performance can be widely used in the manufacturing process apt to be easily damaged by fine dirt or in clean rooms.