



Data Sheet  
Date Prepared:

## LLDPE FA440U

YUCLAIR FA440U is butene-1 copolymer designed for use in agricultural mulching film application. YUCLAIR FA440U provides stronger film than ones made from competitive LLDPE film grades. Therefore YUCLAIR FA440U shows superior tensile strength, tear strength, gel-free, weatherability. Outstanding processibility make this resin an ideal choice for film application when blended with conventional LDPE. YUCLAIR FA440U can be processed readily into blown film using standard extrusion techniques.

YUCLAIR FA440U complies with FDA regulations in 21 CFR177.1520 for all food contact.

### Application / Use Case

Film / mulching film for agriculture

### Specification

|            | Specification | Unit              | Test Method |
|------------|---------------|-------------------|-------------|
| Density    | 0.919         | g/cm <sup>3</sup> | ASTM D1505  |
| Melt Index | 1             | g/10min           | ASTM D1238  |
| Additives  | S, A/B, UV    |                   | SK Method   |

### Physical Properties

|                               | Value | Unit               | Test Method |
|-------------------------------|-------|--------------------|-------------|
| Film Thickness                | 50    | μm                 | ASTM D746   |
| Softening Point(Vicat)        | 102   | °C                 | ASTM D1525  |
| Tensile Strength at Yield(MD) | 120   | kg/cm <sup>2</sup> | ASTM D882   |
| Tensile Strength at Yield(TD) | 110   | kg/cm <sup>2</sup> | ASTM D882   |
| Tensile Strength at Break(MD) | 430   | kg/cm <sup>2</sup> | ASTM D882   |

Head Office 99 Seorin-dong, Jongno-gu, Seoul 110-110, Korea  
Tel. 82-2-2121-5114 Fax. 82-2-2121-7001

SK Institute of Technology 140-1 Woncheon-dong, Yuseong-gu, Taejeon, Korea  
Tel. 82-42-866-7624 Fax. 82-42-866-7603

Online [www.skglobalchemical.com](http://www.skglobalchemical.com)  
[www.skchem.com](http://www.skchem.com)

ISO 9001 Certified





|                               |       |                    |            |
|-------------------------------|-------|--------------------|------------|
| Tensile Strength at Break(TD) | 360   | kg/cm <sup>2</sup> | ASTM D882  |
| Elongation at Break(MD)       | 750   | %                  | ASTM D882  |
| Elongation at Break(TD)       | 850   | %                  | ASTM D882  |
| Tear Strength(MD)             | 5     | g/μm               | ASTM D1922 |
| Tear Strength(TD)             | 12    | g/μm               | ASTM D1922 |
| Spencer Impact Strength       | 10    | kg·cm              | ASTM D3420 |
| Haze                          | 23    | %                  | ASTM D1003 |
| Brittleness Temperature       | < -70 | °C                 | ASTM D746  |

These are typical properties only, and are not to be construed as specific limits.

Head Office 99 Seorin-dong, Jongno-gu, Seoul 110-110, Korea  
 Tel. 82-2-2121-5114 Fax. 82-2-2121-7001

SK Institute of Technology 140-1 Woncheon-dong, Yuseong-gu, Taejeon, Korea  
 Tel. 82-42-866-7624 Fax. 82-42-866-7603

Online [www.skglobalchemical.com](http://www.skglobalchemical.com)  
[www.skchem.com](http://www.skchem.com)

ISO 9001 Certified

