

POM | KEPITAL | Weather resistance grades

Classification

- UV/Light resistance grades
F20-52, F30-52
- Weather and UV/Light resistance grades
F20-51, F30-51
- Special weather resistance grades
 - Weather resistance + Impact modified
 - Weather resistance + Low gloss
- Application for D-ring, high toughness etc.,

Applications



Nipples



Sprinklers



Inside door handles

Weather resistance grades are recommended for parts to be exposed to UV and weather!

Plastics aging

Plastics are damaged based on the duration of exposure under atmospheric environments. The main factors are light(intensity and amount), water(forms and amount), and temperature(pitch).

The most important factor is ultraviolet rays of spectrums consisting of solar power. UV contains high energy, so it can easily break the chemical bonds of plastics. Because of this, plastics aging occur as follows:

- ✓ Color change, gloss loss
- ✓ Embrittlement, strength loss
- ✓ Cracking, peeling, chalking



UV Resistance Grade



General Grade

Various product lines

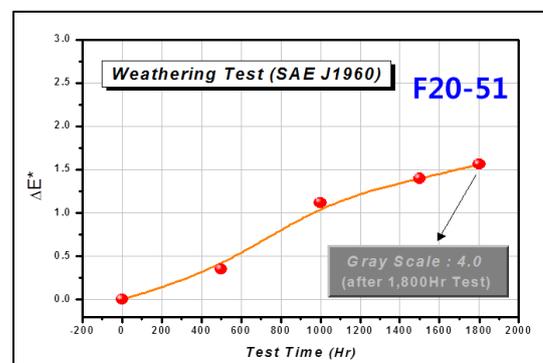
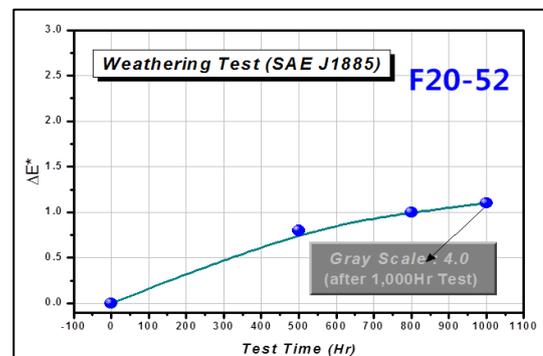
KEPITAL weather resistance grades retain excellent properties when they are exposed to outdoor or UV light. They are applied to various parts due to excellent weather resistance. We have various product lines to meet both general purposes and particular requirements.

(FXX-XXG: Low gloss / FXX-XXU: Impact modified / FXX-XXD: For D-rings)

| Classification | | Grade | | |
|------------------------|------------------|----------|--------------------|-------------------------|
| | | Standard | Speciality | LOF |
| Exposure to UV | High viscosity | - | F10-52H F10-52D | F10-52HLOF |
| | Medium viscosity | F20-52 | F20-52G | F20-52LOF F20-52GLOF |
| | Low viscosity | F30-52 | F30-52G | F30-52LOF |
| Exposure to outdoor/UV | Medium viscosity | F20-51 | F20-52U | - |
| | Low viscosity | F30-51 | F30-51U | - |

Excellent weather resistance property

KEPITAL weather resistance grades have excellent weather resistance properties while retaining the normal properties of POM. Grades for interior applications are used in various colors in addition to the basic natural color. Grades for exterior parts have black-color improved weather resistance. The graph below shows the results of color variation after the weathering test.



Disclaimer

The information contained in this sheet is based on our current knowledge and experience, so it may change as new knowledge and experience become available. This information does not relate to any products made of this product with the inclusion of other additives, such as processing aids or colorants. This product is not intended for use in medical and dental implants and users should meet all safety and health standards. KEP makes no warranty and assumes no liability in connection with any use of this information.