

PRIME UV Packages

PRIME ® UV PACKAGES AVAILABILITY (BASED ON MEDITERRANEAN UV):

*UV and weather test data is available on request.



COLOURS (OTHER THAN BLACK)

Standard Weatherability – 3 to 5 YEARS

Medium Weatherability – 5 to 7 YEARS

High Weatherability – 10 to 15 YEARS.

BLACK

Carbon Black (min. 3.5% loaded) – 3 to 5 YEARS

Carbon Black (min. 4% type P loaded) – 20 YEARS UV

Specially formulated for Solar applications.

All PRIME ® UV protected materials contain synergistic blends of low and high molecular weight HALS (Hindered Amine Light Stabilisers) which offer significant protection to the polymer from attack by harmful UV light. These additives work by a mechanism which scavenges and neutralises harmful free radicals which are generated as part of the UV degradation process. The low molecular weight HALS is more mobile, offering protection to the surface of the polymer from surface cracking etc.

In addition to the HALS additives, PRIME ® products incorporate process and thermal stabilisers to aid the UV protection

1) The process stabiliser protects the polymer from any potential short term thermal degradation in the thermoforming/fabrication process ensuring that the polymer retains as much of its initial properties as possible.

2) The thermal stabiliser offers what is known as long term thermal stabilisation (LTTS). LTTS is essential to combat heat exposure in the final article service life, for example dark plastic components become hot when exposed to sunlight; this heat build-up can cause and accelerate degradation within the polymer leading to premature failure.

Much thought is given to the selection of pigments for outdoor applications such as children's play toys and portable toilet applications. The pigments used in PRIME ® materials for outdoor applications have high weather fastness properties, which allows the correct colour to be maintained for as long as possible during the service life of the article.