



Technical Data Sheet

Product Name: Anti-UV Antioxidant for PU sport track and Silicon PU.

Typical Properties:

Model	Appearance	Colour (Fe-Co)	Density g/cm ³ (25°C)	Viscosity mPa.s (25°C)	Smell
UVK-PGO	Slightly purple transparent liquid	//	0.960±0.02	350±100	With slight special compound smell
UVK-PG03B	Yellowish transparent liquid	≤6	0.985±0.02	700±200	

Solubility: Easily soluble in PU raw material such as polyether polyols, plasticizer, etc

Features & Advantage:

UVK-PGO is a liquid antioxidant, while UVK-PG03B is an efficient and economical liquid antioxidant and Anti-UV agent developed for the all-weather outdoor use of plastic track/silicone PU. It has a comprehensive effect of efficient anti yellowing and anti oxidation. By comprehensively reducing the damage of light, oxygen, heat and other external factors to the molecular structure of polyurethane, delaying the yellowing and pulverization of polyurethane, the purpose of improving quality and extending service life is achieved. Simply adding a small amount can significantly improve the surface adhesion, powdering, discoloration, delamination, and other issues that occur during the summer construction process of polyurethane playground materials.. They have the features and advantages as follows:

- **Liquid at room temperature:** No need to heat and melt, convenient to use, and can also avoid failure accidents caused by incomplete melting of powder antioxidant and yellowing agent.
- **Excellent anti yellowing and anti pulverization effect.** With the same dosage, PG03B has a significantly improved effect compared to commercially available universal anti UV agents or “anti oxygen + anti UV” combination configurations, providing excellent outdoor light and color retention for plastic tracks.
- **Long term efficacy.** It has the characteristics of high monomer molecular weight and good compatibility, reducing migration at high and low temperatures, which is beneficial for the long-term efficacy of anti yellowing and anti pulverization.
- **Flexible addition method:** As PGO and PG03B are both liquid at room temperature and easy to add, they can be added during the production process or added at the construction site according to specific climate conditions, without melting, allowing the material to adapt to various construction climate conditions.

User's Guide:

- UVK-PGO and PG03B can be added to any component of dual component polyurethane plastic track and silicon PU, and then stir evenly.
- The usage amount depends on the yellowing resistance level effect. Within the upper limit threshold of 3% of the total PU usage, the more the amount used, the better the effect. However, it is generally recommended to use 0.2 to 1.5% of the total amount of plastic runway/silicone PU.
- UVK-PG03B can be used alone to achieve antioxidant and UV resistant effects; It can also be used with antioxidant UVK-PGO, which can adapt to various construction climate conditions. Suggested matching ratio PGO: PGG03B=(1-3): 1, and the addition amount can be adjusted reasonably according to the actual construction climate conditions.

Handling & Storage:

Please store in a ventilated and dry cool warehouse, and be sure to store it tightly to avoid sources of ignition and sunlight..

Package: 25kg/200kg in HDPE drum

Shelf Life: The unopened shelf life is 24 months from the date of manufacture. After shelf life, it can still be used if it passes the test.

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