

矽類樹脂劣化抑制劑

Silicon-based resin deterioration inhibitors

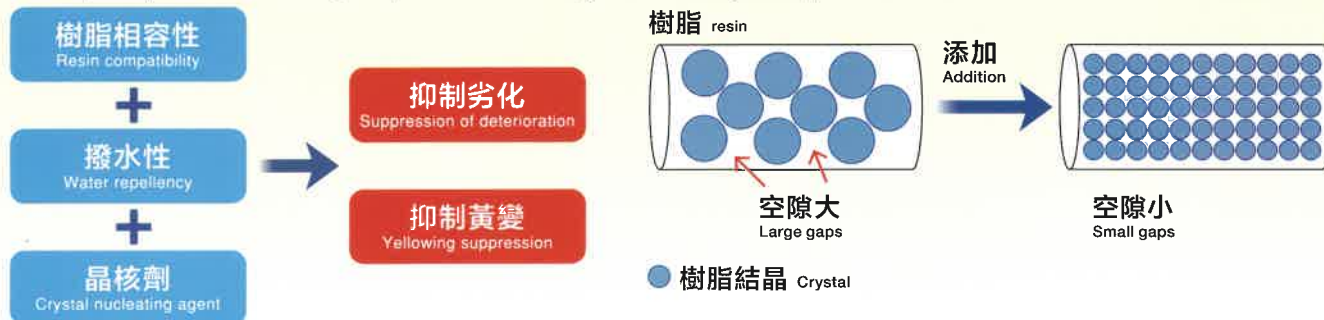
與樹脂的相容性高,以高撥水性抑制樹脂劣化及黃變。

High compatibility with resin and high water repellency suppresses deterioration of resin and yellowing.

特徵 / Features

以撥水性與結晶微細化,防止水與氧氣等入侵,抑制樹脂劣化。

Water repellency and refinement of crystals prevent water and oxygen from entering and suppress resin deterioration.



物性表 / Physical Properties table

	外觀 Appearance	分子量 Molecular weight		耐熱性 (重量損失5% 時之溫度) Heat resistance (5% weight reduction)	特徵 Features
		Mw	Mn	℃	
OGSOL SI-10-10	粉末 Powder	10,100	2,000	362	・粉末粒子微細,使用容易。 ・以結晶微細化防止水及氧氣等的入侵,抑制樹脂劣化。 Water repellent / Resin crystal nucleating agent
OGSOL SI-10-20		1,700	1,000	350	・比SI-10-10, SI-10-20的分子量更低, 所以與樹脂的相容性更高。 ・以結晶微細化防止水及氧氣等的入侵,抑制樹脂劣化。 Water repellent / Resin crystal nucleating agent / Yellowing inhibitor
OGSOL SI-10-40	液體 Liquid	610	560	209	・撥水性最高,能提高膜材的密封(seal)強度。 ・防止球晶過度肥大以抑制樹脂脆化及劣化。 Water repellent / Heat Seal / Embrittlement inhibitor

※可提供母粒樣品 (master batch): PP + SI-10-40 (10wt%)

It is possible to offer it in master batch (PP + SI-10-40 10wt% Compounded).

適用樹脂範例 / Applicable resin example

下表為0.3%添加時之相容性評估。 The compatibility was evaluated when 0.3% was added to the resin.

	結晶性樹脂 Crystalline resin	非晶性樹脂 Amorphous resin
OGSOL SI-10-10	PE、PA、PB	PS
OGSOL SI-10-20	PE	PS、PC
OGSOL SI-10-40	PE、PP	COC
OGSOL SI-30-10	PET	COP、PS、PC、PMMA

※亦有阻燃劑 OGSOL SI-30-10的型錄。

We have a catalog of flame retardants OGSOL SI-30-10.

代理商：松金国际贸易南通有限公司

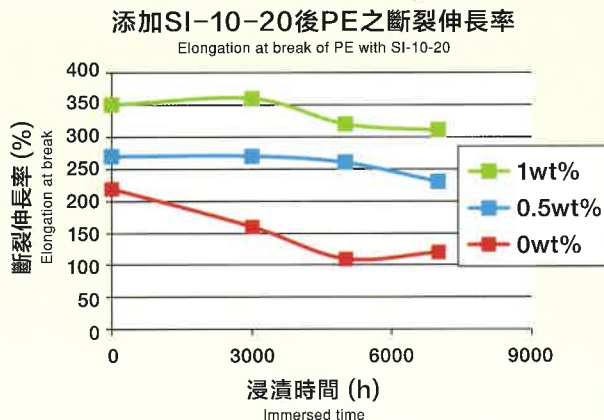
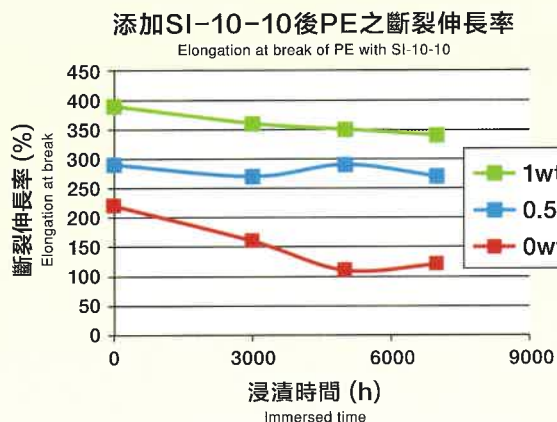
联系电话：13390981305 公司网站：www.matsukanechem.com

結晶性樹脂物理性質資料 / Physical property data for crystalline resin

■ 耐熱水性 Hot water resistance

將OGSOL SI-10-10或SI-10-20等加入聚乙烯中，以110℃之熱水進行浸漬測試，測試後之斷裂伸長率劣化情形明顯受到抑制。

By adding OGSOL SI-10-10 or SI-10-20 to polyethylene, it is possible to suppress a decrease in elongation at break in hot water at 110℃.



■ 撥水性 Water repellency

在聚乙烯樹脂 (中密度) 中添加SI-10-40 (3wt%) 可增加撥水性。

Polyethylene resin (medium density) containing 3wt% SI-10-40 show the superior water repellency.



接觸角: 87.9°
Contact angle

聚乙烯 (未添加本產品)
Polyethylene only

接觸角: 94.0°
Contact angle

添加SI-10-40 (3wt%)
Polyethylene containing
3wt% SI-10-40

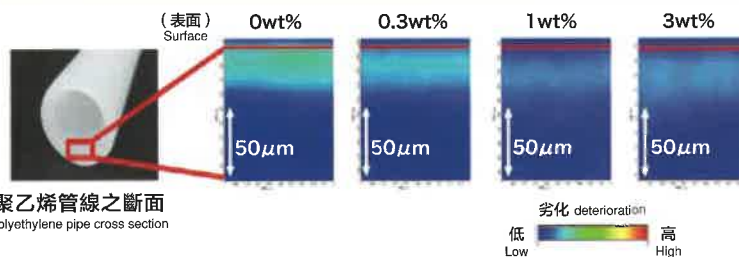
■ 銅害防止性 Effect of Copper inhibitor

在聚乙烯樹脂中添加SI-10-40可抑制劣化。

By adding OGSOL SI-10-40 to polyethylene, deterioration is suppressed.

測試條件: 將聚乙烯管線置入10wt%-氯化銅水溶液，浸漬4500小時後，使用FT-IR觀察斷面。

Evaluation method: After immersion in 10 wt% CuCl₂aq for 4500 hours, Polypropylene pipe was observed by FT-IR images.



非結晶性樹脂物理性質資料 / Physical property data for amorphous resin

添加OGSOL SI-10-20可保持原本透明性，抑制黃變及穿透率下降。

By adding OGSOL SI-10-20 to the resin, it suppresses yellowing and decrease in transmittance while maintaining transparency.

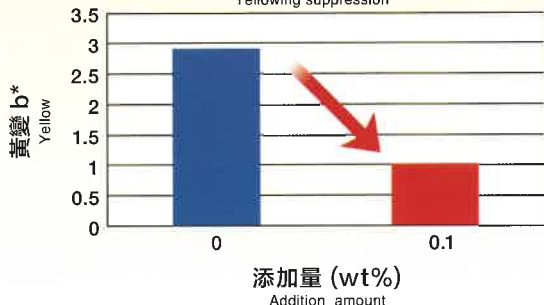
基材樹脂: 聚碳酸酯 (PC)
Resin

測試條件100℃、650小時
Condition

測量部位厚度: 3mm
Thickness

■ 耐熱黃變性 Yellowing resistance by heat

黃變抑制性 (耐熱測試後)
Yellowing suppression



■ 全光線透過率 transmittance

全光線透過率 (耐熱測試後)
Transmittance

