



台灣塑膠工業股份有限公司

FORMOSA PLASTICS CORPORATION

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台鈣劑 TAICAL

由碳酸鈣與 PP 所構成之複合濃縮膠粒

Masterbatch of CaCO₃ + PP

品名(Grade)：TC- P1

一、產品特性(Product properties)

1. TC-P1 是以 PP 為基材，配合高品級碳酸鈣粉，經押出機製成之母粒，色灰白、具良好分散性。

TC-P1 is a PP-based masterbatch containing ultra-fine calcium carbonate. It possesses grayish white color and excellent dispersibility.

2. 可直接與各 PP 系膠粒摻配使用於流延押出熱壓、真空成型、射出等加工製程中，易分散且相容性佳、具改質功能，例如提升產品耐熱性、光澤、剛性、尺寸安定性、降低燃燒發熱量、減少二次公害，縮短成型週期、改善印刷性、質感等。

It can be mixed with PP resin directly for extrusion, vacuum forming, injection etc. and is easy to disperse with good compatibility. It's a kind of modifier which can improve the heat resistance, gloss, flexural strength, size stability, printability and texture, also reduce heat release from burning and secondary environmental pollution.

3. 顆粒狀只需置於滾桶摻與混合均勻，即可投入投料斗製造成型。因不會飛散、污染、付壁、及架橋等現象，故可自動計量供料。

It can be loaded into hopper for processing molding right after well mixing. With the properties of dust-free, pollution-free and anti-bridge, it could be fed by automatic weighing system.

二、用途(Applications)

1. 薄膜扁紗 Flat yarn
2. 蓆、墊、帽等編織帶 Woven mat, cushion and hat
3. 打包帶 Package tape
4. 射出成型品 Injection molding
5. 吹壓成型品 Blow molding
6. 押出成型品 Extrusion molding

三、加工條件建議參考值(Processing suggestions)

1. 填加量依製品特性而定，通常於 5~20 %。

General dosage at 5~20 %, variation according to the characters of product.

2. 加工溫度依各製品主膠料之加工溫度而定，可適於 240±30°C 間使用。

The processing temperature is set according to resin's processing temperature, can be used among 240±30°C.

四、物理特性(Physical properties)

1. TC-P1 膠粒特性(TC-P1 properties)

項目 (Item)	測定方法 (Test method)	單位 (Unit)	代表值 (Typical value)
熔融指數 (MI)	ASTM D1238	g/10mins	3~25
密度 (Density)	ASTM D1505	g/cm ³	1.8
顏色 (Color)	-----	-----	白色 white
水份 (Moisture)	CNS 9004	%	<0.15
形狀 (Shape)	-----	圓柱狀膠粒 granule	2~3mm ^Φ

2. TC-P1 摻配於 PP 中之試片性質 (Sheet properties of TC-P1 mixed with PP)

項目 Item 填加量 Dosage(phr)	密度 (Density) g/cm ³	拉力強度 (Tensile strength) kg/cm ²	落錘衝擊 強度 (Falling ball impact) kg·cm	彎曲強度 (Flexural modulus) kg/cm ²	衝擊強度 (Impact strength)	
					IZOD kg·cm/cm	Charpy kg·cm/cm ²
0	0.92	360	6.9	420	6.83	5.04
5	0.95	350	17.5	435	7.51	5.45
10	0.99	326	24.3	433	7.70	5.84
15	1.01	321	29.9	427	7.84	6.06
20	1.02	311	37.5	425	7.95	6.19

五、包裝 (Packing) : 25kg/bag

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