



16E Tuas Avenue 1, #05-61, JTC Space@Tuas Singapore 639537. Tel: +65 6397 5001

## TECHNICAL DATA SHEET SYNFLOW C 802

### DESCRIPTION

Synflow C 802 is pelletized formulation with 50% ultra-high molecular weight siloxane polymer dispersed in polyethylene, when added to PE compatible system compound, it can improve the processing performance and modify surface properties when the dosage at 0.1 to 1.0%, it can improve the processing and flow of resin including better mold filling & mold release, less extruder torque, internal lubrication and faster throughput; when the dosage at 1-5%, can modify surface properties including lubricity, slip, lower coefficient of friction, and enhance scratch and abrasion resistance.

CHARACTERISTIC	UNIT	TYPICAL VALUE	METHOD
<b>Physical</b>			
Melt Flow index	g/10min	>7	ASTM D1238
Silicone content	-	50	Inhouse
Appearance	-	White Pellet	Visual
Resin Base	-	LDPE	Inhouse

### ACTION PRINCIPLE

When polyethylene at the graft reaction, the viscosity of silicone cross-linked polyethylene system will dramatically increase. Thus degrades the processing performance of polymer, pipe or cable's surface are

not smooth, the extrusion speed is slow and so on. Moreover, cross-linked polyethylene in the extrusion is easily produce pre-crosslinked material when the extrusion time is longer, which will produce small particles or pits on the pipe or cable's surface.

The physical property of polymer plays an important part on extrusion processing. Silicone polymer's surface tension is lower than usual polyolefins. When Synflow C 802 mix in the melt, under the effect of low surface tension, siloxane polymers has a trend to migrate to the surface of the melt while cause a large molecular weight it cannot move out completely, So there is a dynamic lubrication layer formed between The melt surface and screw, With the processing going on, this lubrication layer continuously being taken away and produced. So the flow of resin and processing were getting improved.



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#### APPLICATIONS

For Silane XLPE cable compounds, to improve the processing performance, smooth the surface, reducing pre-crosslinking rate, and prolong the extruder cleaning cycle. Recommended dosage: 0.2-2%

For PE, PP, POE, EPDM etc. maleic anhydride (acrylic acid) grafting reaction, can reduce the extruder corner things and gel rate, smooth out the surface, easier grafting reaction. Recommended dosage: 0.3-0.8%

#### STORAGE AND SHELF LIFE

Synflow C 802 normally has 12 month shelf life from the date of manufacture. However, the following precautions should be observed.

- Packaging should remain sealed
- Avoid storage outside and in direct sunlight
- Use within 8 hours of opening packaging

Synergychem PTE LTD accepts no liability of any kind in case the above mentioned conditions are not fulfilled.

#### TRANSPORT

Not regulated for the transportation.

#### PACKAGING

Product is available in 25kg moisture resistance bag on pallet. Different packages are available on customer request. Product is stable if maintained in the original sealed bag and under ordinary storage conditions.

Normal precautions to a good industrial hygiene and safe working place are, generally, sufficient in handling the preparation, however all operators are kindly requested to handle, use and dispose all wastes of the preparation in accordance with the information reported on SDS.