

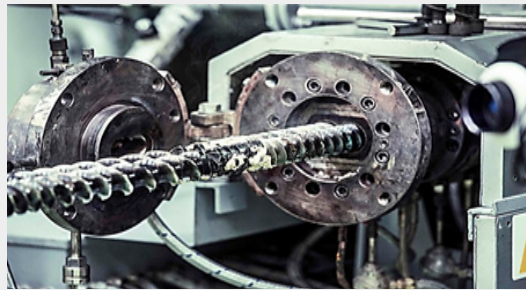


METALTEK
Metalurji Sanayi ve Ticaret A.Ş.

PURGE COMPOUND

INTRODUCTION

A purge compound is a plastic resin compound designed to clean all primary plastic machinery (**injection molding machines, blow molding machines, extruders**) when changing color, resin or simply to remove black specks or contaminations.



WHY CONTAMINANTS APPEAR

- ◆ Thermally/ shear-sensitive materials/ blends/ compounds being degraded inside the extruder.
- ◆ Materials presenting metal affinity and remaining stuck.
- ◆ Design and ageing of the machinery – impacting the presence of dead zones in the barrel/ die-head.
- ◆ Ageing and design of the screw.
- ◆ Frequent changes of RPM.
- ◆ Unusual pressure variation.

REASONS OF PURGING

- ◆ **Solving quality issue**
Solving quality issue during color & material changes.
- ◆ **Remove contamination**
Remove contamination created via carbonization, unmelting.
- ◆ **Production planning**
Reduce substantial time & cost to clean the screw.



When purging:

- ◆ **Between 2 production batches**
Extrude purge compound + last resin base (1:1)
- ◆ **Startup and shutdown**
Extrude purge compound.

SUPPLIED PURGE COMPOUND

Clean Express produced by **Polytechs** (France), has perfectly demonstrated its higher & faster cleaning power in comparison to the virgin or the manual cleaning solutions due to its hybrid nature (mechanical & chemical effects) and defining it as a cost-effective solution:

- ◆ 2 times faster vs the virgin resin.
- ◆ Close to 100 times faster vs the manual cleaning.

Clean Express	Applications	Suitable for...
Clean HDPE HDPE base	Blown & cast film, Injection molding, Wires & cables, Pipes, tubes & profiles, 3D printing (Effective Temp.: below 180°C)	LDPE, LLDPE, EVA, PA11, PA12, PET, TPE, SEBS, TPU, Rigid PVC, XLPE/PEX
Clean LDPE LDPE base	Blown & cast film, Injection molding, Wires & cables, Pipes, tubes & profiles, Bio market, Barrier films (Effective Temp.: 100-180°C)	LDPE, LLDPE, Flexible PVC, Bio resins, XLPE/PEX
Clean PP PP base	Blown & cast film, Injection molding, Bio market (Effective Temp.: below 200°C)	BOPP, CPP, PPH, PPC, PPR
Clean HP PE Metallocene base	Blown & cast film, Injection molding, Wires & cables, Pipes, tubes & profiles, Bio market, Barrier films (Effective Temp.: 220-320°C)	LDPE, LLDPE, HDPE, EVA, EVOH, PPH, PPC, PPR, TPE, Styrenics, Bio resins, XLPE/PEX
Clean VHT Methacrylate base	Blown & cast film, Injection molding, Pipes, tubes & profiles, Compounding (Effective Temp.: 80-230°C)	PA6, PA6.6, PET, PC, PBT, PMMA, SMMA

CLEAN Express ...

- ◆ contains abrasive and surfactant agents that clean mechanically and chemically the extruder and the die.
- ◆ is a filmable resin that will allow a continuous extrusion while purging.
- ◆ contains no toxic, volatile, or corrosive additives.