

4cleanpure

injection moulding

4Cleanpure is a cleaning compound in pellets, concentrate, which has to be mixed at 10% with every thermoplastic, especially studied to clean barrel, screw, nozzle and hot runners from carbon residuals, deposits, incrustations in changing colour and material.

TEMPERATURE RANGE: **4Cleanpure** works efficiently from 80°C up to 420°C.

It is enough to prepare the blend with your own thermoplastic which can resist at the temperature of the machine and of the material to be cleaned.

4Cleanpure is odourless, non-toxic; it doesn't contain solvents and it isn't abrasive.

All components of **4Cleanpure** are qualified as Generally Recognized as Safe (GRAS) by FDA.

4Cleanpure is environmentally safe.

HOW TO USE IT: **4Cleanpure** is in pellets form. Before to use it, it is needed to prepare the blend.

1. Work out the capacity* of the barrel of your machine from the throat to the nozzle in Kgs.

* Injection Capacity - If the total volume (weight) of the barrel of the injection molding machine could be molded into a part, it would be defined as the injection capacity.

- Once found out this capacity, prepare the blend with 10% of **4Cleanpure** and 90% of your thermoplastic (the resin MFI has to be equal or lower than the material that has to be removed), in an amount equal 1/1,5 times the injection capacity.
- Split this amount into 2 equal amounts and do the same with the virgin resin chosen for the cleaning.
- Eject the prior polymer completely.
- Increase of 10°-20° C the temperature of screw and nozzle.
- Feed the barrel starting with virgin resin, followed by the blend prepared with **4Cleanpure**.
Use ½ of the prepared blend and add immediately virgin resin.
Purge the blend of **4Cleanpure** continuously from the nozzle.
- Repeat step 6 for 2 times until the purging with virgin resin is totally cleaned (it depends by the contamination of your machine).

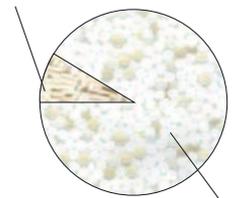
NOTE: the last step must be done with virgin resin or the following material, setting up the next temperature production.

HOW TO CLEAN HOT RUNNERS (after cleaning barrel, screw and nozzle):

- Increase the temperature of the hot runners as much as allowed by the material inside.
- With open mould, load and purge with virgin material.
- Purge with ½ of the prepared blend. Immediately add virgin resin*:
purge out the material as fast as possible.
- Repeat step 3 until the purging with virgin resin is totally cleaned.
- Begin new production.

*** It is very important to add the resin immediately after the blend in order to maintain an adequate back pressure.**

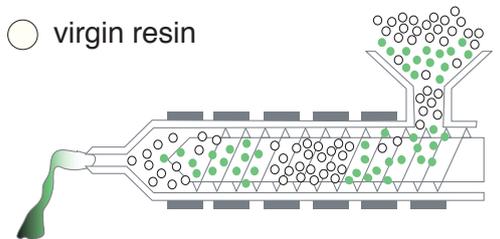
10% **4Cleanpure**



90%
virgin resin

● **4Cleanpure** blend

○ virgin resin



● **4Cleanpure** blend

○ virgin resin

