

# MOULDPRO PURGING INSTRUCTIONS



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## Extrusion

**MPX Multipurge** is a cleaning compound in pellets, concentrate, which has to be mixed at 10% with every thermoplastic, especially studied to clean barrel, screw and head of extrusion from carbon residuals, deposits, incrustations in changing colour and material.

**TEMPERATURE RANGE:** **MPX Multipurge** 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.

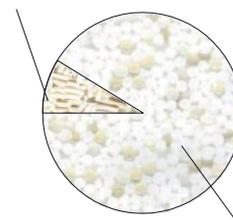
**MPX Multipurge** is odourless, non-toxic; it doesn't contain solvents and it isn't abrasive. All components of **MPX Multipurge** are qualified as Generally Recognized as Safe (GRAS) by FDA.

**MPX Multipurge** is environmentally safe.

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

1. Find out the barrel capacity of your machine from the throat to the die head in Kgs (amount of resin needed to fill the entire barrel from the hopper to the head included).
2. Once found out this capacity, prepare the blend with 10% of **MPX Multipurge** and 90% of your thermoplastic (with MFI equal or lower of the one to clean), in an amount equal to 1,5 times the capacity of the barrel. Take also a quantity of virgin material equal to 1,5 times the barrel capacity.
3. Eject the prior polymer completely.
4. Increase 10°- 20° C the temperature of cylinder and head of extrusion.
5. Purge out with virgin material followed by the blend prepared earlier with **MPX Multipurge**.
6. Purge out completely the blend of **MPX Multipurge** continuously from the head leaving no material into the cylinder.
7. Purge out with virgin resin\* until this is totally cleaned (it depends by the contamination of your machine).

**10% Mpx Purge**



**90% virgin resin**

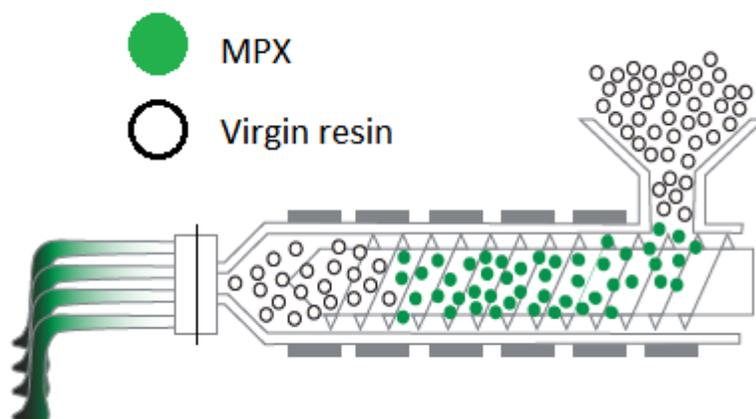
\* the very last step must be done with virgin resin or the following material, setting up the next temperature production.

**Note:** Just for the very first purge it may be necessary to run a second cycle of **MPX Multipurge** blend in order to get a good result (recommended).

Using **MPX Multipurge** on a regular basis will allow you to decrease the quantity necessary for the purge.

INDICATION REQUIRED AMOUNT OF **MPX Multipurge** blend

Ø	LD20 KG	TWIN SCREW KG	LD25 KG	TWIN SCREW KG
20	0.10	0.20	0.12	0.25
30	0.30	0.60	0.40	0.80
40	0.70	1.40	0.90	1.80
50	1.50	3	1.80	3.60
60	2.50	5	3	6
70	4	8	4.80	9.60
80	6	12	7.20	14.50
90	8	16	10.20	20.50
100	11	22	14	28
120	20	40	24	48



## Injection moulding

**MPX Multipurge** 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:** **MPX Multipurge** 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.

**MPX Multipurge** is odourless, non-toxic; it doesn't contain solvents and it isn't abrasive.

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

**MPX Multipurge** is environmentally safe.

**HOW TO USE IT:** **MPX Multipurge** 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.

2. Once found out this capacity, prepare the blend with 10% of **MPX Multipurge** 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.
3. Split this amount into 2 equal amounts and do the same with the virgin resin chosen for the cleaning.
4. Eject the prior polymer completely.
5. Increase of 10°-20° C the temperature of screw and nozzle.
6. Feed the barrel starting with virgin resin, followed by the blend prepared with **MPX Multipurge**.  
Use ½ of the prepared blend and add immediately virgin resin.  
Purge the blend of **MPX Multipurge** continuously from the nozzle.
7. Repeat step 6 for 2 times until the purging with virgin resin is totally cleaned (it depends by the contamination of your machine).

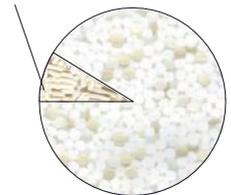
**NOTE: the last step must be done with virgin resin or the following material, setting up the next temperature production.**

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

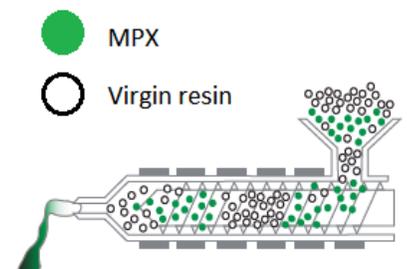
1. Increase the temperature of the hot runners as much as allowed by the material inside.
2. With open mould, load and purge with virgin material.
3. Purge with ½ of the prepared blend. Immediately add virgin resin\*:  
purge out the material as fast as possible.
4. Repeat step 3 until the purging with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

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

10% **MPX Multipurge**



90%  
virgin resin

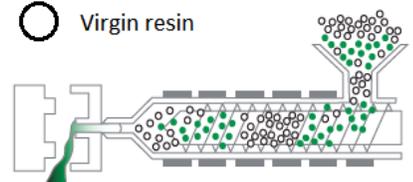


● MPX

○ Virgin resin

● MPX

○ Virgin resin



## Injection moulding

**Masterclean** is a cleaning compound, "ready-to-use", especially studied to clean barrel, screw, nozzle and hot runners from carbon residuals, deposits, incrustations in changing colour and material.

**TEMPERATURE RANGE:** **Masterclean** cleans from 120°C up to 320°C. It works efficiently with all thermoplastic within the indicated range temperature.

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

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

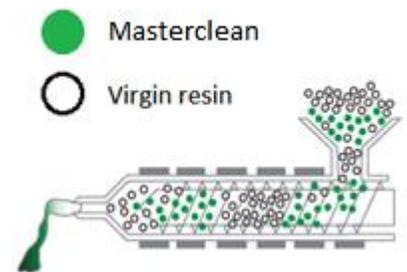
**Masterclean** is environmentally safe.

### HOW TO USE **Masterclean**:

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

\* Injection Capacity - It 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.

2. Once found out this capacity, take this amount of **Masterclean** and the same amount of virgin resin (e.g.: if the capacity is 1 Kg, prepare 1 Kg of **Masterclean** and 1 Kg of virgin resin such as HOPE).
3. Split the amount calculated into 2 equal amounts and do the same with the virgin resin chosen for the cleaning.
4. Eject the prior polymer completely.
5. Increase of 10°-20° C the temperature of screw and nozzle.
6. Feed the barrel starting with virgin resin, followed by **Masterclean**. Use ½ of the prepared **Masterclean** and add immediately virgin resin. Purge out the material as fast as possible, without any soaking time.
7. Repeat step 6 for 2 times until the purging with virgin resin is totally cleaned (it depends by the contamination of your machine).

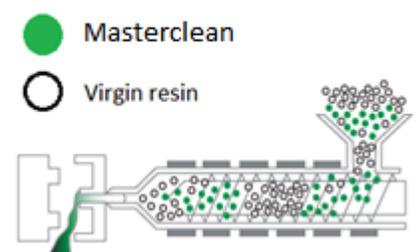


**NOTE: the last step must be done with virgin resin or the following material, adjusting the temperature for the following polymer and start with the next production.**

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

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

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



## Extrusion

**Masterclean** is a cleaning compound, "ready-to-use", especially studied to clean barrel, screw and head of extrusion from carbon residuals, deposits, incrustations in changing colour and material.

**TEMPERATURE RANGE:** **Masterclean** cleans from 120°C up to 320°C. It works efficiently with all thermoplastic within the indicated range temperature.

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

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

**Masterclean** is environmentally safe.

### HOW TO USE **Masterclean**:

1. Find out the capacity of the barrel of your machine from the throat to the die head in Kgs.
2. Once found out this capacity take 1 and a half this amount of **Masterclean** and the same amount of virgin resin (e.g.: if the capacity is 1 Kg, prepare 1,5 Kg of **Masterclean** and 1,5 Kg of virgin resin such as HOPE).
3. Eject the prior polymer completely.
4. Increase of 10°-20° C the temperature of the head of extrusion.
5. Feed the barrel starting with virgin resin, followed by **Masterclean**.
6. Purge out the **Masterclean** as fast as possible, without any soaking time.
7. Load the virgin resin\* and purge it out until it is completely cleaned (it depends by the contamination of your machine).

\* **The last step must be done with virgin resin or the following material, adjusting the temperature for the following polymer and start with the next production.**

**NOTE: During the very first purge it may be necessary run the purging process twice in order to have a good result {recommended}.**

**Using Masterclean on a regular basis will allow you to run just one purge cycle per cleaning.**

INDICATION REQUIRED AMOUNT OF **Masterclean**

Ø	LD20 KG	TWIN SCREW KG	LD25 KG	TWIN SCREW KG
20	0.10	0.20	0.12	0.25
30	0.30	0.60	0.40	0.80
40	0.70	1.40	0.90	1.80
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