

ULTRA PURGE PO-C

Concentrate Grade
Up to 10% Mixing Ratio

Working Temperature	Resins <i>(that will be purged from the barrel)</i>	Applications	Design for
338 _§ F to 608 _§ F 170 _¶ C to 320 _¶ C	PP, PE, HDPE, LDPE, LLDPE, HIPS, GPPS, TPO	Injection Molding Hot Runners Extrusion Film Blow Molding	Color Changes Shut-Downs Material Changes Carbon Build Up

Notes:

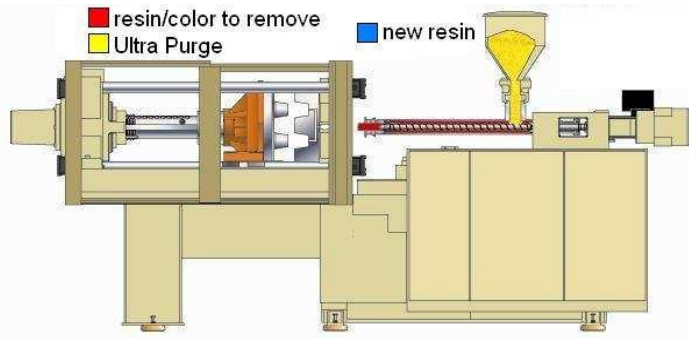
Before usage **Ultra Purge PO-C** is must be mixed with HDPE, PP or TPO with a 10% ratio.
Example: 10 lbs (10Kg.) Ultra Purge PO-C – 90 Lbs (90Kg.) HDPE

Produced By

MOULDS PLUS
INTERNATIONAL

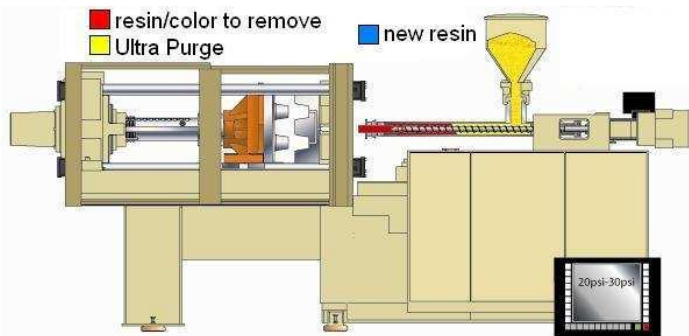
Directions for Use Injection Molding Machines Injection Unit

Step 1



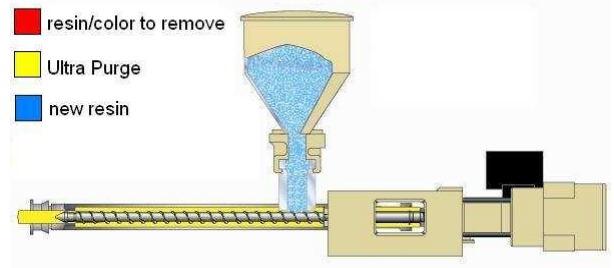
- If you normally experience problems in cleaning the nozzle, increase the temperature to 100°F (50°C)
- **Keep the barrel of the press full of the resin/color you want to purge when adding the Ultra Purge to the machine** (we recommend loading one barrel full of Ultra Purge for machines that are in good working condition)

Step 2



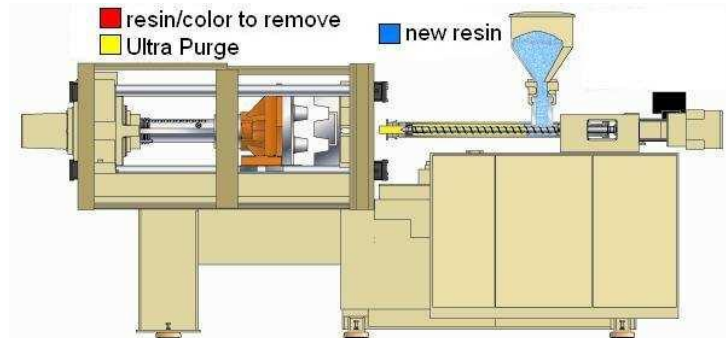
- Adjust the screw back-pressure to allow the screw to make injections
- **For larger machines (over 200Ton), we recommend reducing the shot size to 10-15% of the maximum shot size**

Step 3



- Once the barrel is full of Ultra Purge allow a 3-minute soak time.
*It is not necessary to soak longer than 4 minutes

Step 4



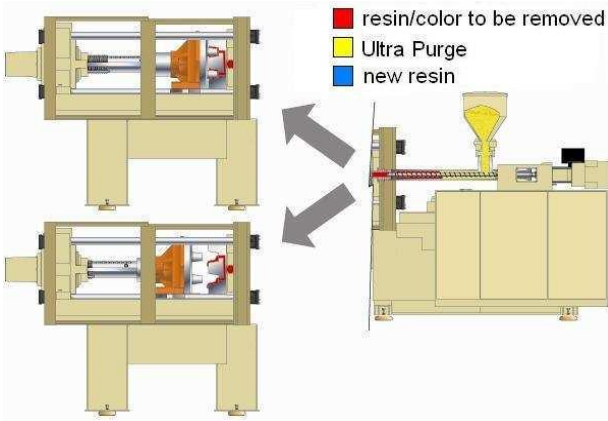
- When the previously loaded quantity of Ultra Purge is used up, load machine with the next production material. It is important **not to run the barrel empty** to improve the performance of Ultra Purge
- Continue running the machine for a total of 4-5 full shots to eliminate remnants of Ultra Purge within the machine.
- Adjust machine to production parameters and begin normal production

Suggestions:

- A second run may be required to fully purge an older or overused machine.

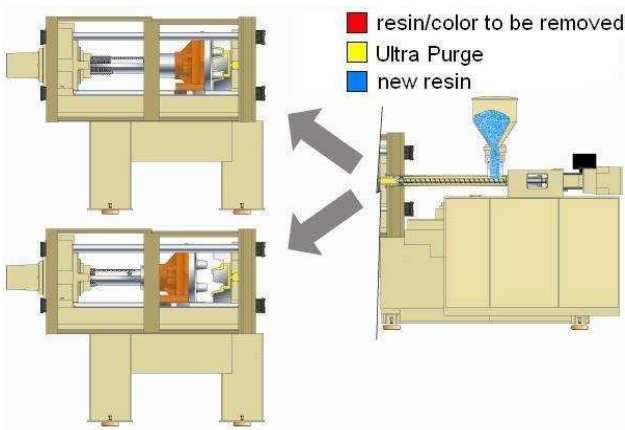
Hot Runners

Step 1



- Increase the temperature of the hot runners in all zones by 40 to 80°F. (20 to 40°C) (*Please check hot runner's temperature limit with the manufacturer.)
- Follow steps 1 and 2 for the injection molding purging procedures that were previously stated. **Remember to keep the barrel of the press full of the resin/color you want to purge when adding the Ultra Purge to the machine**

Step 2

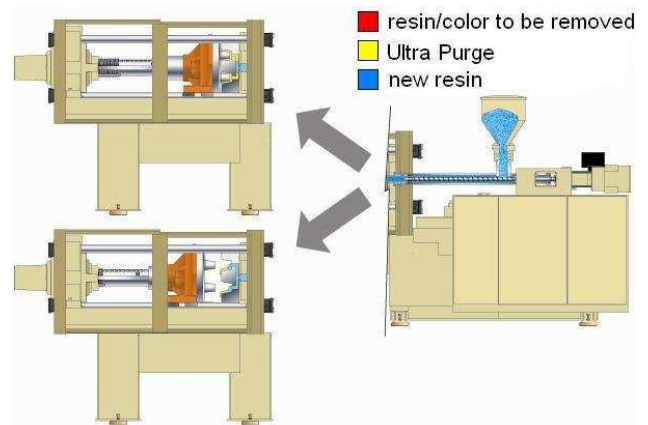


- Start to make injections through the hot runners with the mold closed or opened (we

suggest to keep the mold open if the molded part is difficult to be ejected from the mold).

- Make three injections through the hot runners then allow for a **3 minute soak time**

Step 3



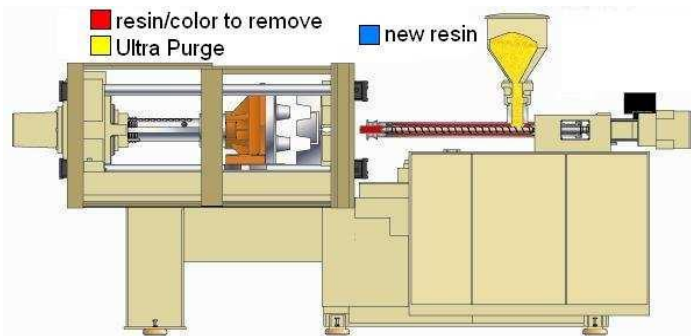
- Continue molding until the molded parts appear visibly clean (we suggest to perform at least 4 injection).
- Load neutral or production material to eliminate the remnants of Ultra Purge within the machine.
- Begin normal production.

Suggestions:

- A second run may be required to fully purge an older or overused machine
- With mirror polished mold, we suggest not to mold the Ultra Purge PO-C.

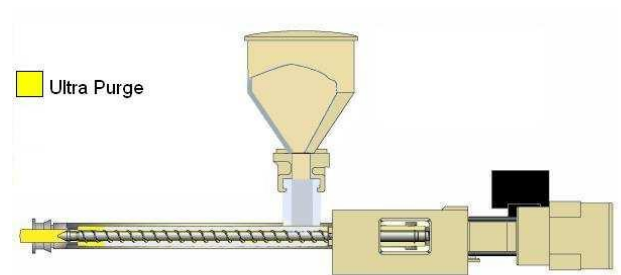
Shutdown Procedures Injection Unit

Step 1



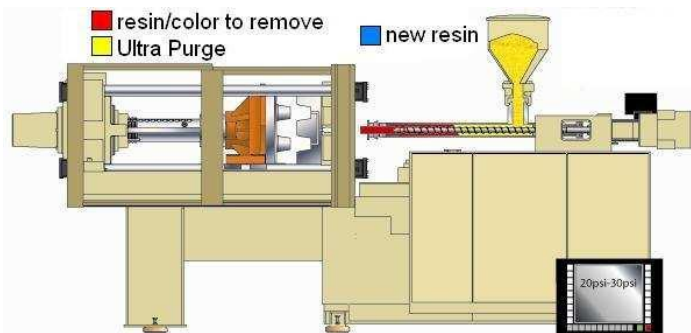
- **Keep the barrel of the press full of the resin/color you want to purge when adding the Ultra Purge to the machine** (we recommend loading half of the barrel capacity of Ultra Purge for machines that are in good working condition)

Step 3



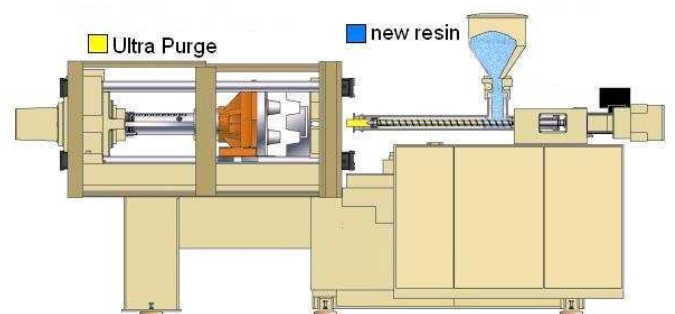
- Empty the barrel of Ultra Purge and completely shut down the machine (turn off all heaters). Do not add any resin after Ultra Purge and don't leave the temperature idle

Step 2



- Adjust the screw back-pressure to allow the screw to make injection
- **For larger machines (over 200Ton), we recommend reducing the shot size to 10-15% of the maximum shot size**

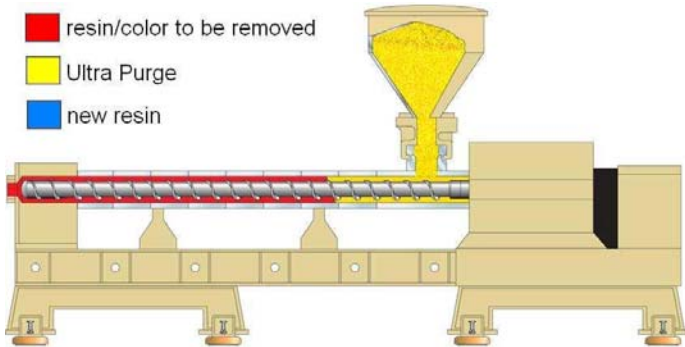
Step 4 (start-up)



- Turn on the machine and when the operating temperature is reached, load half barrel full of Ultra Purge followed by the production resin. It is normal to see contamination being flushed from the press with the first 4-6 shots.
- Adjust the machine to the production parameters and begin normal production

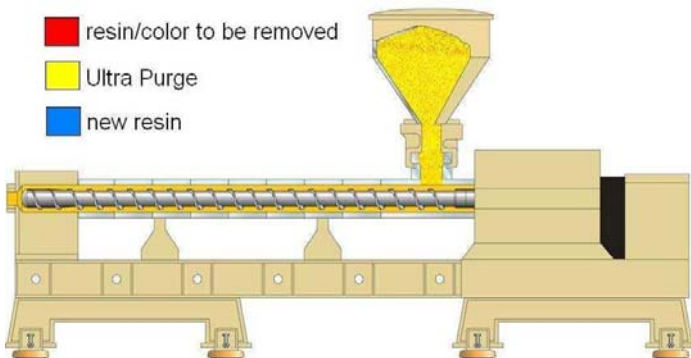
Extruders

Step 1



- If a screen pack is present, please remove it from the machine
- **Keep the barrel of the machine full of the resin/color you want to purge when adding the Ultra Purge.** Run the machine at the same temperature as the previous production material (we recommend loading the barrel with Ultra Purge at twice the amount of the barrel size for machines that are in good working condition)

Step 2

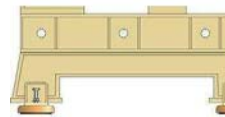


- Adjust screw rotation to low to allow the compound to expand inside the machine. The ejected purging compound should have

a foamy appearance. If it does not, further reduce the screw rotation speed.

Allow Ultra Purge to soak for 3 minutes once it begins to eject out of the machine

Step 3



- Increase screw rotation to maximum allowed settings, load machine with the new production material and flush out any remnants of contamination. It is important **not to run the barrel empty** to maximize the performance of Ultra Purge
- Begin normal production

Suggestions:

- A second run may be required to fully purge an older or overused machine.

Blow Molding without accumulator

Step 1

- If a screen pack is present, please remove it from the machine. Open the purging valve located on the head to allow the resin to be flushed out and increase the head temperature of about 100°F (50°C)
- **Keep the barrel of the machine full of the resin/color you want to purge when adding the Ultra Purge.** Run the machine at the same temperature as the previous production material (we recommend loading the barrel with Ultra Purge at twice the amount of the barrel size for machines that are in good working condition)

Step 2

- Adjust screw rotation to low to allow the compound to expand inside the machine. The ejected purging compound should have a foamy appearance. If it does not, further reduce the screw rotation speed.
Allow Ultra Purge to soak for 3 minutes once it begins to eject out of the machine

Step 3

- Increase screw rotation to maximum allowed settings, load machine with the new production material and flush out any remnants of contamination. It is important **not to run the barrel empty** to maximize the performance of Ultra Purge
- Begin normal production

Suggestions:

- A second run may be required to fully purge an older or overused machine.

MATERIAL SAFETY DATA SHEET

(ISSUE April 16th, 2010)

1. Identification elements of the compound and company

1.1 Compound identification elements

denomination **Ultra Purge PO-C**

1.2 Company identification data:

Italy

M.P.I. s.r.l.
Via D. Carbone, 104 - 15050 Villalvernia (AL)
Country: Italy
Phone: +39-0131- 836136
Fax: +39-0131-836882

USA

Moulds Plus International USA, Inc.
1521 E McFadden Unit G
Santa Ana, CA 92705
Tel 714 708 2663
Fax 714 708 2659

Mexico

Moulds Plus Mexico
Ahorro Postal 103
Del. Benito Juarez
CP 03420 Mexico D.F.
Tel (55) 8590-8834
Fax(55) 9180-1341

e-mail : info@ultrapurge.com
Website: www.ultrapurge.com

1.3 Urgent information

Contact sales office nearest you

2. Composition/ Agents Information

2.1 Chemical features: the detergent mixture ultra purge contains inorganic and inert salts and other components that are confidential. all components are GRAS qualified (generally recognized as safe) by the FDA.

2.2 Dangerous components: none

3. Dangers / Warning

3.1 Risk description: molten plastic or purging compound can cause severe burns.

3.2 Special information of particular risks for humans and environment: none

4. Medical First Aid Information

General Information

4.1 By inhalation: no particular precaution is required

4.2 By accidental contact with eyes: in case of contact with a melted polymer, rinse out with running water seek medical attention immediately

4.3 By accidental contact with skin: in case of contact with a melted polymer, rinse with running water seek medical attention immediately

5. Fire Precautions

5.1. Suitable extinguishing equipment: atomised water jet, extinguish dust, sand, foam, carbon dioxide

5.2 Extinguish material unsuitable for safety reasons: according to our present knowledge there is none

5.3 Dangers that may arise from the substance, compound, combustion or emission of gases: Carbon monoxide fumes may be emitted when combustion occurs with polymeric substances

5.4 Safety equipment for fire fighters: use respirator in unventilated area

6. Measures for accidental spills

6.1 Personal precautions - no particular precaution is required

6.2 Environment protection - comply with local regulations

6.3 Cleaning procedures: use of mechanical equipments for cleaning

7. Handling, storage and usage

7.1 handling: handle as a thermoplastic resin. Before introducing Ultra Purge in the machine always read the related MSDS of the product in which Ultra Purge will be used.

7.2 Storage: store in a cool, dry and well ventilated area. Ensure that the Ultra Purge bucket is sealed after removing the necessary quantity to be used. A sticky substance may form inside the bucket but will not alter the effectiveness of the product.

8. Exposure Control/Individual Protection

8.1 General precautions:

When cleaning the press or the extruder, follow the same precautions as if working with melted polymers

8.2 Respiratory system protection

When cleaning the press or the extruder follow the same precautions as if working with melted polymers

8.3 Hand protections

When cleaning the press or the extruder follow the same precautions as if working with melted polymers

8.4 Eye protection

When cleaning the press or the extruder follow the same precautions as if working with melted polymers

9. Chemical and physical properties

Physical state solid granules

Odour - odourless

Ph:	N/A
Boiling point from:	N/A
Melting point from:	70 °C
In flammability point from:	>300 °C
Ignition temperature:	>450 °C

Explosive properties:	none
Combustion properties:	none
Comparative density at 25 °C:	0.70 gr/cc
Solubility: solubility	negligible water
Thermal decomposition:	starts at 85 °C

10. Stability and Reactivity

10.1 General information

No dangerous reaction is known if storage and handling are performed in compliance with the instructions

10.2 Hazardous conditions: avoid temperatures higher than 80 °C, **except** during the use of the product. Do not

exceed the temperature of 320 °C (608 °F); in case higher temperatures are required, please contact the supplier.

10.3 Hazardous substances: none

10.4 Dangerous decomposition products
If storage and handling are performed as per instructions: none

11. Toxicological information

11.1 General practices

On the ground of our present knowledge it is physiologically tolerable. According to our present knowledge, the product is neither alterable, carcinogenic or tetanal. Its components are "GRAS" by the FDA.

11.2 Acute toxicity

Ld/Lc50 values remarkable for classification

Ld50/ Lc50 (oral rat): >>10,000mg/kg

12. Ecological information

12.1 Biodegradability

The polymeric element is not biodegradable (PE, PS, PMMA.....or as shown on the label)
The remaining part is completely biodegradable.

12.2 environment effects

None

12.3 Toxic effect

It is determined that there are no negative effects to fish
How to handle situation when product gets into water treatment plants
It is determined not to have any harmful effects on water treatment plants

12.4 More Ecological Considerations

Handle with care and correct usage so as to not cause any negative effects to the environment

13 Considerations for Proper Disposal

13.1 Disposal of the product or its residuals: it can be disposed by burning, landfill or according to city regulations

13.2 Container disposal:

it can be disposed by burning, landfill or according to city regulations

14 Transport Information

14.1 There is no danger or restriction for any mode of transport

15 Regulations Information

15.1 Labelling in compliance with European (CEE) regulations: exempt

15.2 TSCA

All components/ingredients are listed under the TSCA (Toxic Substances Control Act) inventory

15.3 It is ROHS compliant

15.4 Tallow/BSE/TSE

We do not use tallow or any other derived materials in the manufacture of Ultra Purge

15.5 REACH

All components/ingredients are, where necessary, pre-registered substances according to the REACH regulation.

Also the product doesn't contain any substance belonging to the candidate list SVHC (Substances of Very High Concern)

16. Hazardous Material Identification System (HMIS)

Health Hazard	0
Minimal	
Reactivity Hazard	0
Minimal	
Flammability Hazard	0
Minimal	
Unusual Fire and Explosion Hazard	None

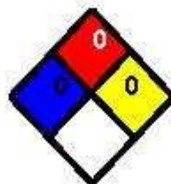
17. Additional Information

Material Safety Data Sheet Disclaimer

Material Safety Data Sheet should be kept and maintained because they provide necessary, helpful, and useful information on the properties of the chemical or chemical product. You should familiarize yourself with those properties, such as flammability, corrosiveness and toxicity as well as storage and handling information, before you work with the chemical. Also, it is vital to your personal safety that you are able to refer to that MSDS immediately in the event of an emergency such as a spill, fire or physical contact with the chemical.

Moulds Plus International believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data is not to be taken as warranty or representation for which Moulds Plus International assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, State and local laws regulations.

Moulds Plus International does not claim this MSDS to be all inclusive. It shall be used only as a guide. The data is offered as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. Moulds Plus International shall not be held liable for any damage, death, injury or expense arising out of or in any way connected with the handling, storage, use or disposal of the Ultra Purge product.



NFPA RATING

HEALTH	0	
FLAMMABILITY	0	
REACTIVITY	0	
PROTECTIVE EQUIP.		

HMIS RATING