



Don't just purge...*ULTRA PURGE!*

ULTRA PURGE P-O

Purging Compound

Produced By

MOULDS PLUS
INTERNATIONAL

ULTRA PURGE P-O

Ready-to-Use Purging Compound

ULTRA PURGE P-O is a specially designed cleaning compound that comes premixed in a ready-to-use pellet form. It cleans black specks and deposits from - screws, barrels, nozzle, hot runners and heads of extruders. Superior results are obtained when doing periodic cleaning or color changes with all thermoplastics resins such as:

PP, PE, HDPE, LDPE, LLDPE, HIPS, GPPS, TPO, etc...

With working temperature from **338°F to 572°F (170°C to 300° C)**

How Ultra Purge works:

- **ULTRA PURGE** is nonabrasive and works through a chemical reaction. With the presence of an innovative chemical component, color, incrustation, black specks and also rust are softened, removed and ejected from the press.
- The new formula is added with expanding agents, which allow the compound to be more efficient even in difficult to clean situation.
- **ULTRA PURGE** cleans at the processing temperature of the previous production material.
- **ULTRA PURGE** is recommended for injection molding machines, extruders and hot runners.

Benefits:

- EU food contact certified
- Only a small quantity is required (One Barrel Full)
- Non-Toxic
- No soak-time required
- Easy-to-use and efficient in cleaning process
- No more wasting of materials or loss of production time
- Odorless...does not produce gasses of any kind
- Does not contain solvents, therefore it will not ruin any equipment
- If used frequently, **ULTRA PURGE** will preserve equipment from steel oxidation by forming a protective, anti-adherent layer which makes the next cleaning process quicker and easier

All components are qualified as **GRAS** (Generally Recognized As Safe) by **FDA**

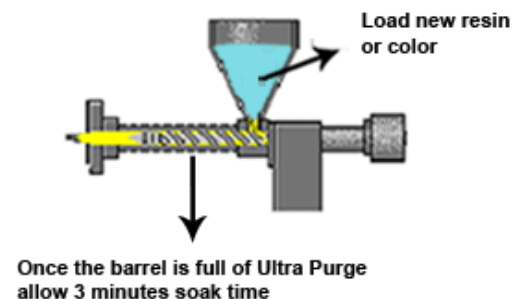
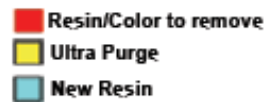
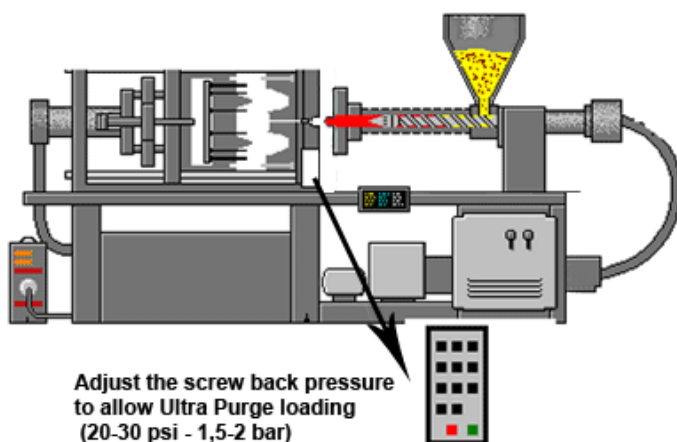
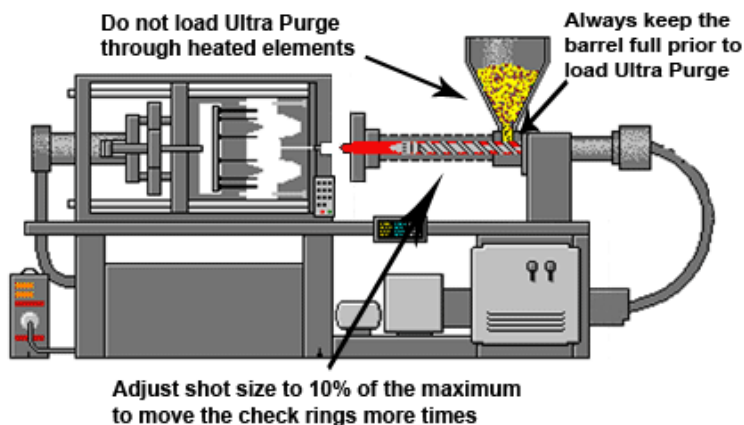
Suggestions:

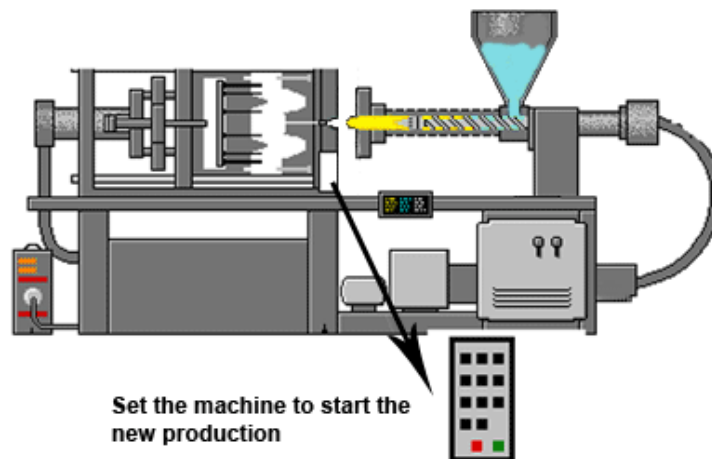
- A second run may be required to fully purge an older or overused machine.
- It is highly recommended that the Ultra Purge container be properly sealed after each use. The forming of small clots of sticky substance may occur due to moisture. Please note that this will not alter the efficiency of the product.

Directions for Use:

Use with Injection Molding Machines:

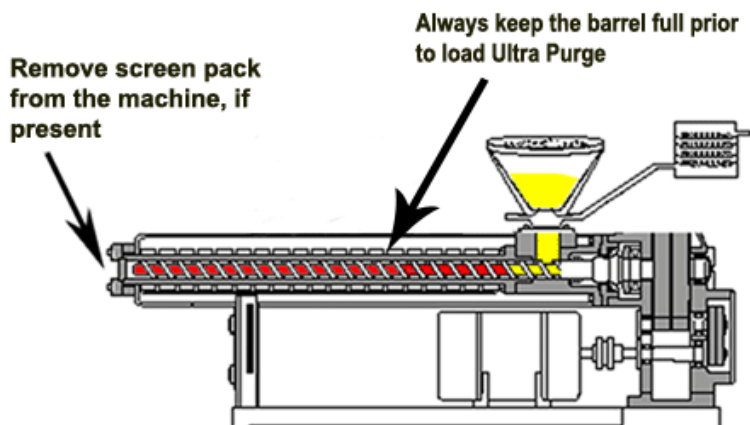
- Run the machine with a neutral grade of the plastic resin you are going to purge
- Adjust the screw back-pressure to allow the loading of Ultra Purge (generally 20 to 30 psi)
***For larger machines (over 200Ton), we recommend reducing the shot size to 10-15% of the maximum shot size**
- **Without running the barrel empty**, load Ultra Purge at a moderate screw rotation speed and begin injection cycle (we recommend loading the quantity of one time the content of the barrel for machines that are in good working condition)
- In hard to clean situations, a 3-minute soak time is necessary.
***Do not soak longer than 3 minutes**
- When the previously loaded quantity of Ultra Purge is used up, load machine with the next production material. It important **not to run the barrel empty** to improve Ultra Purge's performance
- Continue running machine for a total of 4-5 full shots to eliminate remnants of Ultra Purge within the machine.
- Begin normal production

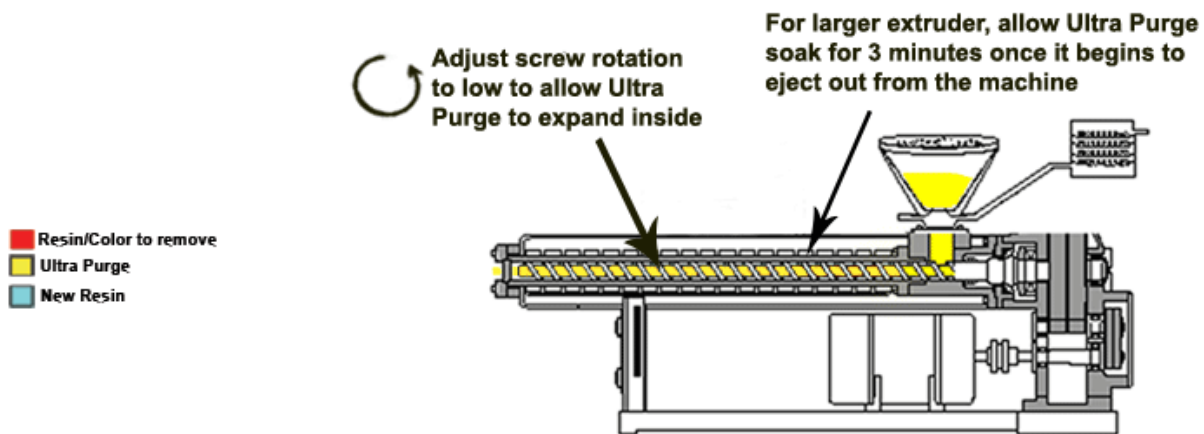




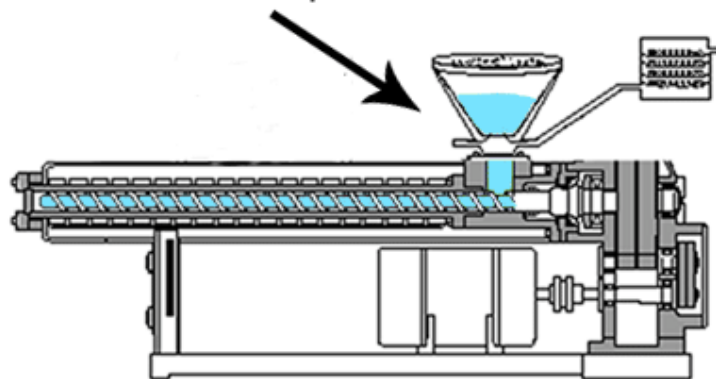
Use with Extrusion Machines:

- Run the extruder with the neutral grade of the plastic resin you are going to purge to remove the largest portion of the color (one time the content of the extruder)
- If a screen pack is present, please remove it from the machine
- **Without running the extruder empty**, load Ultra Purge and run machine at the same temperature as previous material (we recommend loading the quantity of 2 times the content of the barrel for machines that are in good working condition)
- 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.
***For larger extruders, allow Ultra Purge to soak for 3 minutes once it begins to eject out of the machine**
- When the previously loaded quantity of Ultra Purge is used up, load machine with the next production material. It important **not to run the barrel empty** to improve Ultra Purge's performance
- Begin normal production





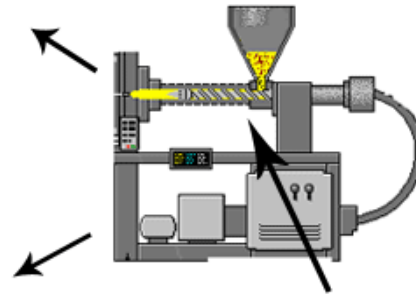
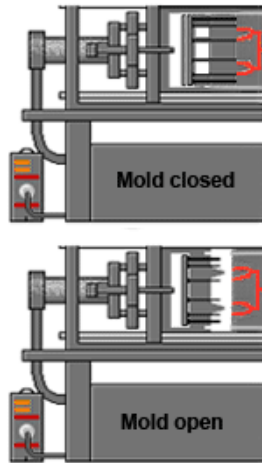
When the previously loaded quantity of Ultra Purge is used up load the machine with the next production material



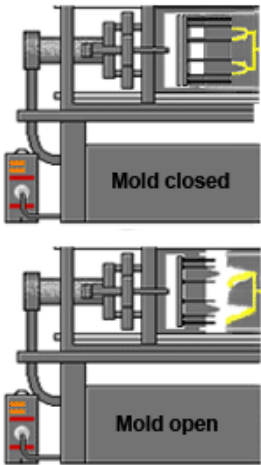
Use with Hot Runners:

- Clean first screw and barrel using the Ultra Purge P-O grade until the ejected Ultra Purge appears visibly clean ejecting Ultra Purge on the side.
- Start to make injection thru the hot runners with the mold close or open until the molded or ejected Ultra Purge appears visibly clean (we suggest to keep the mold open if the molded part is difficult to be ejected from the mold).
- In “hard to clean” situations, we recommend to increase the hot runner temperature of 20-30°C (30-40°F) and to increase the injection molding cycle time.
- 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.

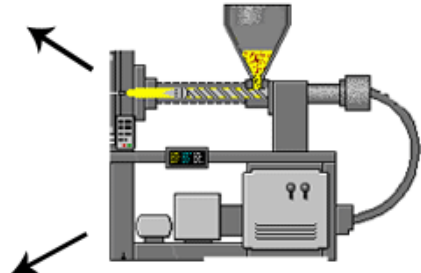
- Resin/Color to remove
- Ultra Purge
- New Resin



Clean first screw and barrel until the ejected Ultra Purge appears visibly clean

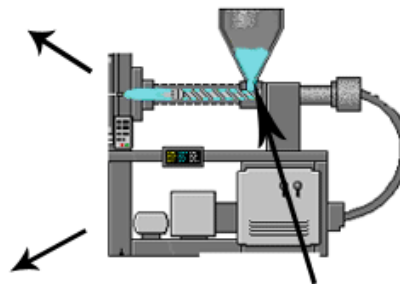
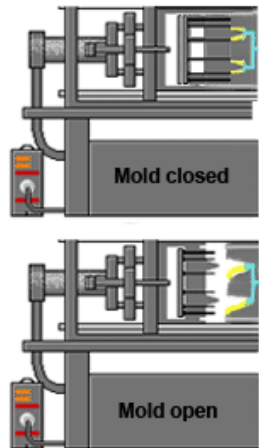


Inject through the hot runners until the molded or ejected Ultra Purge is visibly clean



In "hard to clean" situation, we recommend to increase the hot runner temperature of 20-30°C (30-40°F) and to increase the injection molding cycle time

We suggest to keep the mold open if the moulded part is difficult to be ejected from the mold



Load production material to eliminate all the remnants of Ultra Purge and begin normal production

Safety: Purging should be performed with purge guards closed and proper face shield, gloves and long sleeve clothing.

MATERIAL SAFETY DATA SHEET

(ISSUE NO. 3 DATED AUGUST 16th, 2005)

1. Identification elements of the compound and company

1.1 Compound identification elements

denomination **Ultra Purge P-O**

1.2 Company identification data:

Italy

Moulds Plus International s.r.l.
Via D. Carbone, 104 - 15050 Villalvernia (AL)
Country: Italy
Phone: +39-0131- 83140
Fax: +39-0131-836882

USA

Moulds Plus International USA, Inc.
2809 La Salle Ave
Costa Mesa, CA 92626
Tel (714) 360 2202
Fax(714) 708 2659

e-mail : info@moulds.org
Website: www.moulds.org

1.3 Urgent information

Contact person Pestarino Graziano

2. Composition/ Agents Information

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

2.2 Product description: blend of additives in olefin resin

2.3 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 man 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 and call a physician immediately

4.3 By accidental contact with skin: in case of contact with a melted polymer, rinse with running water and call a physician immediately

4.4 If swallowed: no harmful effect has been found after swallow of the resin

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 Particular dangers coming from the substance, from the same compound, from the combustion products or from the exhaled gases: as for every polymeric product, a wrong combustion might provoke carbon monoxide fumes.

5.4 Safety equipment for fire watchers: respirator in case of unventilated area

6. Measures by accidental out rush

6.1 Personal precautions - no particular precaution is required

6.2 Environment protection - comply with local regulations

6.3 Cleaning/gathering procedures: use of mechanical means

7. Handling, storage and usage

7.1 handling: handle as a thermoplastic resin. Before introduce Ultra Purge in the machine read always the MSDS of the product with Ultra Purge will be in contact with

7.2 Storage: store in a cool and dry area, normally ventilated.
Make sure that the bucket is perfectly closed after taking of quantity necessary for more or less immediate use. The formation of small clots of sticky substance inside the bucket does not injury the efficiency of the product, it just shows the moisture absorption index.

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:	negligible water solubility
Thermal decomposition:	starts at 85°C

10. Stability and Reactivity

10.0 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 a product for higher temperatures is required, please contact to 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 it is neither alterable, nor cancerogenous nor teratogenous. Its components are "GRAS" by FDA.

11.2 Acute toxicity

Ld/Lc50 values remarkable for classification

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

12. Ecological information

12.1 persistence and 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

A biologic accumulation is unlikely.
There is no danger or restriction for rail transport

12.3 Eco-toxic effect

It is determined that there are no harmful eco-toxic effects to the fish
How to handle situation when product gets into water plant:
It is determined not to have any harmful effects in the water plant

12.4 More Ecologic Indications

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

16. Additional Information

All data shown on this sheet are based on the information available at our company on the last issue date. They do not mean any assurance for every specific feature of the product and represent no contract obligation.

The user must make sure of the conformity and completeness of information with regard to the specific use of the product.

The information furnished in this MSDS is not intended to create any liability of any kind on the part of Moulds Plus International. In no event Moulds Plus International will be responsible for any death, injury or damage of any nature resulting from the use of reliance upon, or measure of the MSDS or material to which it refers. The data on this sheet relates only to the specific material designed herein.

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