

Ultra Purge[™] HT

Ready-to-Use Glass-Filled Purging Compound

Benefits

- High efficiency
- Rapid cleaning effect
- Easy to use
- Operator and equipment safe
- Wide application range

Ultra Purge[™] HT is a ready-to-use glass-filled purging compound. It can be used for cleaning in injection molding, and extrusion applications. Ultra Purge[™] HT can also be used for the cleaning of screw, barrel, nozzle, hot-runner and gate of injection molding machines processing thermoplastic resins. The purging concentrate consists of highly efficient cleaning additives.

Ultra Purge[™] HT can be used at processing temperatures from 200 °C (392 °F) to 380 °C (716 °F).

The purging compound is especially recommended for color and material change as well as for the removal of black spots, carbon residues and shut-downs.

Ultra Purge[™] HT is suitable for following thermoplastic

10011101	
Resin	Suitable
Amorphous resins	
Crystalline resins	
PA, POM	
PET	
Polyolefins	
PS	
TPE-TPR	
High-temperature engineering resins	++
PVC	
TPU	
Transparent polyamides, CA, CAB, when	
switching from any resin to PMMA	
When switching from any resin to PC	
When switching from any resin to PMMA	

Typical Properties

Appearance

Translucent white or bluish-white granules mixed with grayish-brown tablets

Special Notes

- Do not use on mirror polished surfaces.
- Do not load Ultra Purge[™] through heated feeding line Ultra Purge[™] starts to melt at 80 °C / 176 °F
- Do not allow a longer soak time than suggested.
- Do not use more than recommended quantities of Ultra Purge mer cleaning.
- Do not increase temperatures when dealing with thermo-sensitive resins or additives.
- Do not mold difficult-to-eject parts- when molding Ultra Purge[™] you may get a short shot. Do not use Ultra Purge[™] outside its working
- temperature range.

Application

This document is a general description on how to use Ultra Purge [™]. Request your customized instructions by contacting your nearest sales office or local distributor.

Please read carefully the SDS before using Ultra Purge[™].

We recommend the following cleaning procedures.







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Cleaning of Screw and Barrel - Injection Molding:

- Move the injection unit to the back position. We recommend keeping the barrel full of resin when adding Ultra Purge min the machine.
- Manually remove all possible contamination sources in the hopper/mixer/filters. Add Ultra Purge (1 barrel capacity).
- Make injections until you see Ultra Purge being ejected through the nozzle.
- For machines larger than 500 tons, we recommend reducing the shot size to 20% of the maximum allowed shot size.
- For best performance, we recommend a 3 minute soak time.
- Add the next production resin/color directly after Ultra Purge[™] and make injections until Ultra Purge[™] is displaced from the machine. (In case of material change with different working temperatures, empty the barrel from Ultra Purge before adding the next production resin and set the temperatures to the next production settings.)
- Make 4-5 injections with the next resin to completely displace Ultra Purge[™].
- If contamination persists, repeat steps.

Cleaning of Screw and Barrel -High-Temperature Injection Molding Material Change - DIFFERENT Temperature:

- 1. Move the injection unit to the back position. We recommend keeping the barrel full of the previous production resin.

 Add Ultra Purge using a quantity equivalent to 2
- times the barrel capacity.
- Flush the machine empty from the Ultra Purge and adjust the temperatures/settings to the NEXT PRODUCTION MATERIAL.
- Once the temperatures are at your new desired production settings, load 1 barrel capacity of Ultra Purge [™] followed by your production resin.
- If contamination still persists; load 1 barrel capacity of Ultra Purge [™] followed by production resin and start production.

Cleaning of Screw and Barrel – High Temperature Injection Molding - Material Change -SAME Temperature:

- Move the injection unit to the back position. We recommend keeping the barrel full of the previous production resin.

 Add Ultra Purge using a quantity equivalent to 2
- times the barrel capacity.
- 3. Load next material directly behind Ultra Purge™
- Make injections until Ultra Purge[™] is cleared from machine.
- Begin normal production

Cleaning for Shut-down and Start-Up - Injection Molding – If the temperature is lower than 350°C/662°F:

SHUT DOWN

- 1. Move the injection unit to the back position. We recommend keeping the barrel full of resin when
- Reduce the shot size and make injections until the barrel is completely empty. DO NOT ADD RESIN AFTER ULTRA PURGE™!
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

START-UP

- 1. Turn on the machines to production settings, load half barrel capacity of Ultra Purge followed by your production resin and begin normal production.
- If contamination persists, follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup.







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Cleaning for Shut-down and Start-Up - Injection Molding - High Temperature:

SHUT-DOWN

- 1. Move the injection unit to the back position. We recommend keeping the barrel full of resin when adding Ultra Purge[™] in the machine...
- Add 1 barrel capacity of Ultra Purge
- Reduce the shot size and make injections until the barrel is completely empty. DO NOT ADD RESIN AFTER ULTRA PÚRGĖ™!
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

START-UP

- Turn on the machines to production settings, load 1 barrel capacity of Ultra Purge[™] followed by your production resin and begin normal production.
- If contamination persists, follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup.

Cleaning of Screw and Barrel - Extruder:

- We recommend keeping the barrel full of resin when adding Ultra Purge $^{\text{TM}}$ in the machine.
- We recommend removing the finest layer of the screen pack. Make sure that the pressure or torque force remains within safety limits when running Ultra
- Add Ultra Purge[™] (approximately 1.5 times the extruder barrel capacity).
- Extrude at production speed until Ultra Purge[™] is ejected from the machine.
- Add the next production resin directly after Ultra
 - (In case of material change with different working temperature, empty the barrel from Ultra Purge before adding the next production resin and set the temperatures to the next production settings)
- Extrude the next production resin at high speed to completely displace Ultra Purge [™]
- If possible, replace the screen pack during this
- If contamination persists, repeat steps.

Cleaning for Shut-down and Start-Up - Extruder: SHUT DOWN

1. We recommend keeping the barrel full of resin when adding Ultra Purge[™] in the machine.

- We recommend removing the finest layer of the screen pack. Make sure that the pressure or torque force remains within the safety limits when running Ultra Purge[™].
- Add Ultra Purge[™] (1 barrel capacity).
- Purge out until the barrel is completely empty. DO NOT ADD RESIN AFTER ULTRA PURGE ™
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

START-UP

- 1. Turn on the machines to production settings, load half barrel capacity of Ultra Purge followed by your production resin and begin normal production. If possible, replace the screen pack during this phase.
- If possible, replace the screen pack during this phase.
- If contamination persists, follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup.

Please refer to specific cleaning process.

Storage/Handling

Ultra Purge[™] HT should be stored in a dry indoor area at room temperature. For further information on storage, handling, hazards, etc. please refer to safety data sheet.

Shelf Life

18 months

Packaging
Ultra Purge HT is available in a variety of package sizes. Please contact Chem-Trend customer service for

Further Information

for this industry.

While the technical information and suggestions for use contained herein are believed to be accurate and reliable, nothing stated in this bulletin is to be taken as a warranty either expressed or implied.



