

# Don't just purge... *Ultra Purge!* (TM)

# **Technical Data Sheet**

# **Ultra Purge 5150**

Ready-to-use purging compound with Ultra-X technology

# Please read carefully TDS-SDS before using Ultra Purge

Working temp range	Works with	Applications	Designed for
from 160°C / 320°F		Injection Molding	Color Changes
		Hot Runners	Material Changes
to 350°C / 662°F	Universal - All purpose	Extrusion	Carbon Build Up
		Blow Molding with/without accumulator	Shut-Downs
		Sheet Extrusion	







Ready-to-use purging compound with Ultra-X technology

Working temp range from 160°C / 320°F

Universal - All purpose

to 350°C / 662°F

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### Injection molding - SCREW-BARREL

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.

- Move the injection unit to the back position. We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Manually remove all possible contamination sources in the hopper/mixer/filters...
- Add Ultra Purge (1 barrel capacity).
- Make shots until you see Ultra Purge being ejected through the nozzle (Ultra Purge will look white and foamy).
- For machines larger than 500 ton we recommend reducing the shot size to 20% of the maximum allowed shot size.
- Allow for a 3 minutes soak time for best performance.
- 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 temperature, empty the barrel from the Ultra Purge before adding the next production resin and set the temperatures to production settings).

- Make 4-5 shots with the next resin to complete the purge.
- If contamination persists repeat steps.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





Ready-to-use purging compound with Ultra-X technology

Working temp range from 160°C / 320°F

Universal - All purpose

to 350°C / 662°F

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### Injection molding - Hot runners - MOLD OPEN

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.

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- We recommend increasing hot runner temperatures (tips and manifold), if possible, and nozzle by 30°C / 50°F.
- Manually remove all possible contamination sources in the hopper/mixer/filters...
- Add Ultra Purge (1 barrel capacity).
- With mold open make shots until you see Ultra Purge being ejected through the hot runners (Ultra Purge will look white and foamy).
- For machines larger than 500 ton we recommend reducing the shot size to 20% of the maximum allowed shot size.
- Allow for a 3 minutes soak time for best performance. Add the next production resin directly after Ultra Purge.
- Continue making shots with Ultra Purge.
- Make 4-5 shots of the next resin to complete the purge. Set all the parameters to production settings.
- If contamination persists repeat steps.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





Ready-to-use purging compound with Ultra-X technology

Working temp range from 160°C / 320°F

Universal - All purpose

to 350°C / 662°F

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# Injection molding - Hot runners - MOLD CLOSED

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.

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- If possible, we recommend increasing hot runner temperatures (tips and manifold) by 30°C / 50°F.
- Manually remove all possible contamination sources in the hopper/mixer/filters...
- Add Ultra Purge (1 barrel capacity) and mold parts until Ultra Purge 100% molded in to part.
- Let Ultra Purge soak for 3 minutes in hot runners and barrel for best performance. Add the next production resin directly after Ultra Purge.
- Continue molding parts out of the Ultra Purge.
- Make 4-5 cycles with the next resin to complete the purge. Set all the parameters to production settings.
- If contamination persists repeat steps.

Special notes:

TDS-Ultra\_Purge\_5150\_rev4\_ENG

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





Ready-to-use purging compound with Ultra-X technology

Working temp range from 160°C / 320°F

Universal - All purpose

60°C / 320°F to 350°C / 662°F

Please read carefully TDS-SDS before using Ultra Purge

# Injection molding - SHUT DOWN/START-UP

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.

#### **SHUT DOWN**

- Move the injection unit to the back position. We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Add half barrel capacity of Ultra Purge.
- Reduce the shot size and make shots 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**

- 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. Good parts should be running shortly.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





Ready-to-use purging compound with Ultra-X technology from 160°C / 320°F Working temp range Universal - All purpose

to 350°C / 662°F

## Please read carefully TDS-SDS before using Ultra Purge

#### **Extrusion**

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.

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Add Ultra Purge (approximately 1.5 times the extruder barrel capacity)
- Extrude at low speed until Ultra Purge being ejected from the machine.
- We recommend to let Ultra Purge soak in the barrel for 5 minutes. Allow for a 10 minutes soak time for difficult applications.
  - If extruder pressure builds up after loading Ultra Purge, remove the screen pack.
- Add the next production resin directly after Ultra Purge.

(In case of material change with different working temperature, empty the barrel from the Ultra Purge before adding the next production resin and set the temperatures to production settings).

- Extrude the next production resin at higher speed to flush away contamination. If possible, replace the screen pack.
- If contamination persists repeat steps.

**Special notes:** 

TDS-Ultra Purge 5150 rev4 ENG

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





Ready-to-use purging compound with Ultra-X technology

Working temp range from 160°C / 320°F

Universal - All purpose

160°C / 320°F to 350°C / 662°F

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### **Extrusion - SHUT DOWN/START-UP**

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.

### **SHUT DOWN**

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Add Ultra Purge (1 barrel capacity).
- If extruder pressure builds up after loading Ultra Purge, remove the screen pack.
- 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

- 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 screenpack.
- If contamination persists follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup. Good parts should be running shortly.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





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Working temp range from 160°C / 320°F

Universal - All purpose

to 350°C / 662°F

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### **Blow Molding with accumulator**

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.

- Before starting the purging process, if possible, increase the accumulator temperature of at least 30°C / 50°F.
- The amount of Ultra Purge required (kg or lb) equals 7 times accumulator capacity e.g. 4L accu. needs 28kg of Ultra Purge ready to use.
- As soon as Ultra Purge is loaded in the machine, set the temperature of the accumulator back to normal production parameters.

Please notice that on large machines it usually takes more than 1 hour for the temperature to decrease.

- Load Ultra Purge and make shots until Ultra Purge is ejected from the die.
- Reduce the thickness of the parison and adjust accumulator shot size to the maximum allowed settings.
- Let Ultra Purge soak in the barrel and accumulator for 5-10 minutes.
- Add the next production resin directly after Ultra Purge.
- After 4-5 shots with thin parison, increase the parison thickness and make full shots with the production resin to flush away contamination.
- Set all the parameters to production settings. If contamination persists repeat steps.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





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Working temp range from 160°C / 320°F

Universal - All purpose

160°C / 320°F to 350°C / 662°F

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### Blow molding with accumulator - SHUT DOWN/START-UP

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.

#### SHUT DOWN

- Add Ultra Purge and make shots until the product is ejected from the die.
- Reduce the thickness of the parison and adjust accumulator shot size to the maximum allowed settings.
- After 4-5 shots with thin parison, increase the parison thickness and empty the system completely.
   DO NOT ADD RESIN AFTER ULTRA PURGE!
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

### START-UP (Turn on the machine to production settings)

- Load Ultra Purge until it is ejected from the die. Reduce the thickness of the parison and adjust accumulator shot size to the maximum allowed settings.
- Let Ultra Purge soak in the barrel and accumulator for 5-10 minutes.
- After 4-5 shots with thin parison, increase the parison thickness and make full shots with the production resin to flush away contamination.
- Begin normal production, if contamination persists follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





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Working temp range from 160°C / 320°F

Universal - All purpose

160°C / 320°F to 350°C / 662°F

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### **Blow Molding without accumulator**

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.

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- In case of difficult color changes and black specks removal increase the head temperatures of about 30°C / 50°F.
   For easy color changes and thermo-sensitive material DO NOT increase the temperatures.
- Add Ultra Purge (roughly 1.5 times the barrel capacity).
- If a screen pack is present, please remove it from the machine.
- If present, open the purging valve located on top of the head to allow the resin to be flushed out during the purging process.
- When Ultra Purge is ejected from the die let it soak in the barrel for 5-10 minutes. Add the next production resin directly after Ultra Purge.
- Increase and decrease alternatively the parison thickness (if possible) to flush away contamination.
- Set all the parameters to production settings. If contamination persists repeat steps.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





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Universal - All purpose

to 350°C / 662°F

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### Blow molding without accumulator - SHUT DOWN/START-UP

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.

#### **SHUT DOWN**

- When all production resin has been used up, load 50% barrel volume capacity of Ultra Purge.
   Extrude at slow screw rotation speed until the barrel is completely empty.
- If a screen pack is present, please remove it from the machine.
- If present open the purging valve located on top of the head to allow the resin to be flushed out during the purging process.
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

### START-UP (Turn on the machine to production settings)

- Load Ultra Purge, at slow screw rotations speed, until it is ejected from the die. Allow Ultra Purge to pass through the barrel in 5-10 min.
- Add the next production resin directly after Ultra Purge and begin normal production.
- If contamination persists, follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
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Universal - All purpose

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### **Extrusion - SHEET**

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.

- Before starting the purging process, decrease the temps in the head middle area (-20°C/-40°F) and increase the temps on the sides (+20°C/+40°F).
- Manually remove all contaminations from the feeding area.
- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Add Ultra Purge, the amount required for the purging process equals 1 full system capacity (barrel + head).
- Reduce the screw rotation speed in order to allow Ultra Purge to pass through the barrel in 5-10 minutes.
   If necessary, in order to keep safe barrel pressure, remove the finest layer from the screen pack.
- Load the next production resin directly after Ultra Purge.
- When Ultra Purge starts to be ejected, increase the screw rotation to the maximum safe speed to flush out all contaminations.
- Set all the parameters to production settings and begin normal production.
- If contamination persists repeat steps.

### Special notes:

TDS-Ultra\_Purge\_5150\_rev4\_ENG

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.





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Universal - All purpose

160°C / 320°F to 350°C / 662°F

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### **Sheet Extrusion - SHUT DOWN/START-UP**

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.

#### **SHUT-DOWN**

- We recommend keeping the barrel full of resin when adding Ultra Purge in the machine.
- Manually remove all contaminations from the feeding area.
- Add Ultra Purge. The amount of Ultra Purge required for the purging process equals 50% of the system volume capacity (barrel+head).
- Purge out until the barrel is completely empty. DO NOT ADD RESIN AFTER ULTRA PURGE!
   If necessary, in order to keep safe barrel pressure, remove the finest layer from the screen pack.
- Turn off the machine completely (do not leave heaters in "Maintenance/Idle" mode).

#### START-UP (Turn on the machine to production settings)

- Add Ultra Purge. The amount of Ultra Purge required for the purging process equals 50% of the system volume capacity (barrel+head). Load the next production resin directly after Ultra Purge.
- Reduce the screw rotation speed. When Ultra Purge starts to be ejected, increase the screw rotation
  to the maximum safe speed to flush out all contaminations.
- Set all the parameters to production settings and begin normal production.
- If contamination persists follow the standard cleaning procedure. It is normal to see contamination being flushed out on startup. Good parts should be running shortly.

- Do not use on mirror polished surfaces with hardness lower than 45 HRC.
- 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 what suggested.
- Do not use more than recommended quantities of Ultra Purge per cleaning.
- Do not increase temperatures if 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.