



QUALIPURGE
Ultra PLAST PO-CS
Ready to use Purging Compound

ULTRA SYSTEM

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ULTRA PLAST PO-CS

Ready to use Purging Compound

Ultra Plast is a specially developed cleaning compound that is delivered in a premixed and ready-to-use pellet form. It is specific for the cleaning of endless screws, barrels, nozzles, hot runners and extrusion heads to remove burnt material (colour) rests, deposits, incrustations and black specks during colour and/or material change of all thermoplastics such as: **PVC, EVA, POM, HDPE, LDPE, PP, Polyolefin resin, TPU etc.**

At a processing temperature ranging from 140° C to 300° C (284° F to 572° F) it removes, at the temperature of the previously processed material any incrustation and deposit.

The compound is **not abrasive** and works with a chemical reaction. Due to particular chemical components, coloured and burnt polymers, incrustations, black specks and also rust are softened, removed and ejected from the press. Consequently **NO MECHANICAL ACTION** is made on the machine parts!

If used frequently, it will preserve all the equipment from steel oxidation and make the following cleaning process quicker and easier.

It cleans at the processing temperature of the previous production material and no soak time is required. It is recommended for hot runners.

Ultra Plast is not toxic and is odourless. It will not damage your equipment because it does not contain solvents: all components are qualified as GRAS (Generally Recognized As Safe) by FDA .

It may happen that running Ultra Plast in older machines, where the equipment is overused, the cleaning process may not remove all old rests of material ran months ago. In this case, a second run may be required to fully purge the machine

It is highly recommended that the container be properly sealed after each use. The forming of small clots of sticky substance may occur. Please note that this will not alter the efficiency of the product.

The recommended storage time for Ultra Plast is 12-18 months.

Use with Injection Moulding Machines (screw/barrel cleaning):

NB: We advise to purge first from the screw nozzle, in order to avoid detached burnt material to get into the hot runner and then to inject it into the hot runner and process it.

- In case of material supply from silos take off the supply tube as well as the masterbatch/colour supply. Make sure that there are no traces of colour inside the machine. Use compressed air to clean!
- Increase barrel temperature by 10-30°C; in most cases this operation is not necessary; only when the temperatures are very low. In case of PVC or POM do not increase the temperatures as those materials do not support high processing temperatures.
- Load screw, barrel with a neutral grade of plastic resin (possibly suitable material) and run the machine as long as the material comes out with a lighter colour (i.e. from red to pink and from dark blue to light blue)
- Adjust the **hydraulic** back-pressure of the machine to allow the loading of Ultra Plast (generally from 5 to 10 bars); if the specific backpressure is displayed, refer to the attached “conversion table” as the specific backpressure depends on the screw diameter.
- Do **NOT** empty the screw as the screw may slip
- Load Ultra Plast (fill the barrel completely) and start purging by small shots
- **Do not leave the purging compound longer than 5 minutes in the machine or in the hopper with temperatures !**
- Continue the purging process until the ejected Ultra Plast appears visibly clean. Do NOT empty the screw but
- load machine with the next production material and run machine (with normal processing values) to eliminate all removed rests of Ultra Plast within the machine. This operation is not necessary when cleaning the hotrunner immediately after the screw.
- Begin normal production

Use with Injection Moulding Machines (hot runners cleaning):

- In case of material supply from silos take off the supply tube as well as the masterbatch/colour supply. Make sure that there are no traces of colour inside the machine. Use compressed air to clean!
- Run the machine with a neutral grade of the plastic resin you are going to purge
- Increase hot runners’ temperature as much as possible (up to 300°C – in most difficult cases up to 350°C – but possibly not lower than 260°C) according to the processed material (attention with PVC and POM which do not support high temperatures). As this operation takes some time it should be done immediately
- Load Ultra Plast PO-CS in the machine and start to mould (the necessary quantity should be one or twice the net capacity of the barrel, depending on material, masterbatch, hot runners’ type, quantity of cavities and items weights) until the moulded parts appear visibly clean.
- When the moulded pieces are clean you may start the new production; if the pieces should come out with colour stripes (that means not yet perfectly clean) charge some more PO-CS (approx. from 1 to 2 kg according to machine dimension) and mould it.
- You can also clean the hot runner with open mould; in this case protect the fix part of the mould with a piece of cardboard or a metal shield
- When the moulded part is visibly clean, put back regular production settings, load the production material (PE, PP, PVC, POM, PS, TPU) or neutral material and begin normal production.

In case of very dirty screws/barrels and hot runners you should repeat the operation immediately after, for a second time. Between one and the other cycle you should mould approx. 10 pieces.

Use with EXTRUSION Machines:

- Run the machine with the neutral grade of the plastic resin you are going to process
- If a filter is present remove it from the machine (it is not strictly necessary, but the purging compound might fill the filter with dirtiness detached from the screw and it will be necessary to replace the filter after cleaning operation)
- Load Ultra Plast and run machine at a 30-40° C increased temperature (if possible) **In case of PVC or POM do not increase the temperatures as those materials do not support high processing temperatures.** The material must come out foamy, otherwise reduce further screw speed.
- **If the purging compound mainly comes out from the venting hole, it is necessary to increase the screw speed or to try and close the venting hole. If the venting is connected with a vacuum pump, switch it off.**
- If the purging compound continues to flow out from the venting hole, it should be loaded slowly.
- Load neutral or production material and run machine to eliminate all rests of Ultra Plast within the machine
- Begin normal production

INSTRUCTIONS FOR USE DURING MACHINE SHUT DOWN

This purging material can be used as an “antioxidant” material and be kept inside the screw/barrel :

On weekends or during holidays , switch off the machine or leave the temperature not less than 100°C (even if this procedure takes some time) and fill the screw and barrel with purging compound.

When the machine is again switched on, eject all purging compound (when the machine reaches all programmed temperature values) , fill a small new fresh quantity of purging compound (1-2 kg) in order to push out the old one and restart production.

ATTENTION !!!!!

All indicated instructions are general instructions and may vary from one type of machine and its condition to the other. In case of any question, information and/or doubt, do not hesitate and contact either your agent/distributor or our technical office.

MATERIAL SAFETY DATA SHEET

ISSUE 1/17 of 30/01/2017

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIERS

PRODUCT NAME : **ULTRA PLAST PO-CS**

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST IDENTIFIED USES : PURGING COMPOUND FOR PLASTIC PROCESSING

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY NAME: ULTRA SYSTEM S.A

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E-MAIL : INFO@ULTRASYSTEM.CH WEBSITE :WWW.ULTRASYSTEM.CH

1.4 EMERGENCY TELEPHONE NUMBER

EMERGENCY PHONE : DOTT. PAOLO BALAGNA +39 330 595553 MRS RENATE BEVER +39 340 7153093

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

NOT A HAZARDOUS SUBSTANCE OR MIXTURE ACCORDING TO REGULATION (EC) NO. 1272/2008. THIS SUBSTANCE IS NOT CLASSIFIED AS DANGEROUS ACCORDING TO DIRECTIVE 67/548/EEC.

2.2 LABEL ELEMENTS PARTICURAR RISK FOR MAN AND ENVIRONMENT: NONE.

2.3 OTHER HAZARDS - MOLTEN PLASTIC CAN CAUSE SEVERE BURNS

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 CHEMICAL FEATURES: THE DETERGENT MIXTURE ULTRA PLAST CONTAINS INORGANIC AND INERT SALTS AND POLYMERS. THESE COMPONENTS ARE CONSIDERED AS CONFIDENTIAL INFORMATION. ALL COMPONENTS ARE GRAS QUALIFIED (GENERALLY RECOGNIZED AS SURE) BY FDA AND REGISTERED UNDER REACH.

3.2 PRODUCT DESCRIPTION: BLEND OF ADDITIVES IN THERMOPLASTIC RESIN

3.3 DANGEROUS COMPONENTS: NONE

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

IF INHALED NO PARTICULAR MEASURES, MATERIAL IS NOT DANGEROUS.

IN CASE OF SKIN CONTACT NO PARTICULAR MEASURES, MATERIAL IS NOT DANGEROUS AND DOES NOT CAUSE SKIN SENSIBILIZATION. IF NECESSARY WASH OFF WITH SOAP AND WATER.

IN CASE OF EYE CONTACT FLUSH EYES WITH WATER AS A PRECAUTION.

IF SWALLOWED RINSE MOUTH WITH WATER.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED : NONE

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
NO PARTICULAR MEASURES, MATERIAL IS NOT DANGEROUS.

5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL, EXTINGUISH DUST, SAND OR CARBON DIOXIDE.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE CARBON OXIDES AND OTHER DECOMPOSITION PRODUCTS.

5.3 ADVICE FOR FIREFIGHTERS WEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE FIGHTING IF NECESSARY.

5.4 FURTHER INFORMATION AS FOR EVERY POLYMERIC PRODUCT, A WRONG COMBUSTION MIGHT PROVOKE CARBON MONOXIDE FUMES

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

NO PARTICULAR PRECAUTION IS REQUIRED.

6.2 ENVIRONMENTAL PRECAUTIONS COMPLY WITH LOCAL REGULATIONS ABOUT POLYMERS.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP SWEEP UP AND SHOVEL. KEEP IN SUITABLE CONTAINERS FOR DISPOSAL.

6.4 REFERENCE TO OTHER SECTIONS FOR DISPOSAL SEE SECTION 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

HANDLE AS A THERMOPLASTIC RESIN. BEFORE INTRODUCE ULTRA PLAST IN THE MACHINE READ ALWAYS THE MSDS OF THE PRODUCT WHICH ULTRA PLAST WILL BE IN CONTACT WITH

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

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STORE IN A COOL AND DRY AREA, NORMALLY VENTILATED MAKE SURE THAT THE BUCKET IS CLOSED AFTER TAKING OF QUANTITY NECESSARY FOR MORE OR LESS IMMEDIATE USE. THE FORMATION OF SMALL CLOTS OF STICKY SUBSTANCE DOES NOT INJURY THE EFFICIENTCY OF THE PRODUCT, IT JUST SHOWS THE MOISTURE ABSORPTION INDEX.

7.3 SPECIFIC END USES SEE SECTION 1.2

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

8.2 EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS GENERAL INDUSTRIAL HYGIENE PRACTICE.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION FOLLOW THE SAME PRECAUTIONS AS IF WORKING WITH POLYMERS.

SKIN PROTECTION FOLLOW THE SAME PRECAUTIONS AS IF WORKING WITH POLYMERS.

BODY PROTECTION FOLLOW THE SAME PRECAUTIONS AS IF WORKING WITH POLYMERS.

RESPIRATORY PROTECTION RESPIRATORY PROTECTION IS NOT REQUIRED.

IN ANY CASE FOLLOW THE SAME PRECAUTIONS AS IF WORKING WITH POLYMERS.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

A) APPEARANCE FORM: SOLID GRANULES - COLOUR: WHITE - LIGHT GREY

B) ODOUR : LEMON FLAVOUR

C) ODOUR THRESHOLD ----

D) PH N.A.

E) MELTING POINT FROM 70°C

F) INITIAL BOILING POINT AND BOILING RANGE - N.A.

G) FLASH POINT >450 °C

H) EVAPORATION RATE - N.A.

I) FLAMMABILITY (SOLID, GAS) >300 °C

J) UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS N.A.

K) VAPOUR PRESSURE N.A.

L) VAPOUR DENSITY N.A.

M) RELATIVE DENSITY 0.70 G/CC

N) WATER SOLUBILITY NEGLIGIBLE WATER SOLUBILITY

O) AUTOIGNITION TEMPERATURE >450 °C

P) DECOMPOSITION TEMPERATURE >85°C

R) VISCOSITY N.A.

S) EXPLOSIVE PROPERTIES N.A.

T) OXIDIZING PROPERTIES : NONE

9.2 OTHER SAFETY INFORMATION

FOLLOW THE SAME PRECAUTIONS AS IF WORKING WITH POLYMERS

10. STABILITY AND REACTIVITY

10.1 REACTIVITY NO DANGEROUS REACTION IS KNOWN IF STORAGE AND HANDLING ARE PERFORMED IN COMPLIANCE WITH THE INSTRUCTIONS

10.2 CHEMICAL STABILITY NO DANGEROUS REACTION IS KNOWN IF STORAGE AND HANDLING ARE PERFORMED IN COMPLIANCE WITH THE INSTRUCTIONS

10.3 POSSIBILITY OF HAZARDOUS REACTIONS NO DANGEROUS REACTION IS KNOWN IF STORAGE AND HANDLING ARE PERFORMED IN COMPLIANCE WITH THE INSTRUCTIONS

10.4 CONDITIONS TO AVOID TEMPERATURES MORE THAN 60°C DURING STORAGE AND MORE THAN 400°C DURING PURGING.

10.5 INCOMPATIBLE MATERIALS STRONG OXIDIZING AGENTS

10.6 HAZARDOUS DECOMPOSITION PRODUCTS IF STORAGE AND HANDLING ARE PERFORMED AS PER INSTRUCTIONS: NONE

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NONE

SKIN CORROSION/IRRITATION NONE

SERIOUS EYE DAMAGE/EYE IRRITATION LIKE ANY SOLID PRODUCT, THE CONTACT WITH EYES CAN CAUSE IRRITATION.

RESPIRATORY OR SKIN SENSITIZATION NONE

GERM CELL MUTAGENICITY NONE

CARCINOGENICITY IARC: NO COMPONENT OF THIS PRODUCT IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.

REPRODUCTIVE TOXICITY NONE

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE NONE

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE NONE

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POTENTIAL HEALTH EFFECTS

INHALATION NONE

INGESTION MAY BE HARMFUL IF SWALLOWED IN BIG QUANTITY (>10 G/KG).

SKIN NONE

EYES LIKE ANY SOLID PRODUCT, THE CONTACT WITH EYES CAN CAUSE IRRITATION.

11.2 ADDITIONAL INFORMATION RTECS: NOT AVAILABLE

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.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY NONE

12.2 PERSISTENCE AND DEGRADABILITY THE POLYMERIC ELEMENT IS NOT BIODEGRADABLE. THE REMAINING PART IS COMPLETELY BIODEGRADABLE.

12.3 BIOACCUMULATIVE POTENTIAL A BIOLOGIC ACCUMULATION IS UNLIKELY

12.4 MOBILITY IN SOIL NONE

12.5 RESULTS OF PBT AND VPVB ASSESSMENT IF USED CORRECTLY AND PROPER DISPOSAL IS APPLIED , NO BIOLOGICAL ACCUMULATION IS POSSIBLE

12.6 OTHER ADVERSE EFFECTS HANDLE WITH CARE AND USE CORRECTLY : THIS WILL NOT CAUSE ANY NEGATIVE EFFECTS TO THE ENVIRONMENT

13. CONSIDERATIONS FOR PROPER DISPOSAL

13.1 WASTE TREATMENT METHODS

PRODUCT CAN BE DISPOSED BY RECYCLING, BURNING, LANDFILL OR ACCORDING TO CITY REGULATIONS. WE SUGGEST TO RECYCLE, AS IT IS COMPOSED BY POLYMERS.

PACKAGING CAN BE DISPOSED BY RECYCLING, BURNING, LANDFILL OR ACCORDING TO CITY REGULATIONS. WE SUGGEST TO RECYCLE, AS IT IS PP.

14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

14.1 UN NUMBER ADR/RID: - IMDG: - IATA: -

14.2 UN PROPER SHIPPING NAME

ADR/RID: NOT DANGEROUS GOODS

IMDG: NOT DANGEROUS GOODS

IATA: NOT DANGEROUS GOODS

14.3 TRANSPORT HAZARD CLASS(ES) ADR/RID: - IMDG: - IATA: -

14.4 PACKAGING GROUP ADR/RID: - IMDG: - IATA: -

14.5 ENVIRONMENTAL HAZARDS ADR/RID: NO IMDG MARINE POLLUTANT: NO IATA: NO

14.6 SPECIAL PRECAUTIONS FOR USER THERE IS NO DANGER OR RESTRICTION FOR ANY MODE OF TRANSPORT

15. REGULATIONS INFORMATION

THIS SAFETY DATASHEET COMPLIES WITH THE REQUIREMENTS OF REGULATION (EC) NO. 1907/2006 AND 1272/2008.

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE NONE

15.2 CHEMICAL SAFETY ASSESSMENT NONE

15.3 LABELLING IN COMPLIANCE WITH EUROPEAN (CEE) REGULATIONS: EXEMPT

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 FOREVERY 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.

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