

# **QUALIPURGE Ultra PLAST PET-S**

**Ready to use Purging Compound** 



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# **ULTRA PLAST PET-S**

## **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 and hotrunners, to remove burnt material (colour) rests, deposits, incrustations and black specks during colour and/or material change specifically for **PET**.

At a processing temperature ranging from 250° C to 320° C 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 to close the bulk properly after each use. The forming of small clots of sticky substance may occur. This will not alter the efficiency of the product.

The recommended storage time for ULTRA PLAST is 12-18 months.

## **Instructions for use on INJECTION MACHINES (screw / barrel cleaning)**

- Purge screw and barrel with natural PET (from 6 to 10kg) as long as the material colour becomes less strong (for example from red colour to light pink or from dark blue to light blue etc.)
- Load screw, barrel and accumulator with ULTRA PLAST PET-S (one or twice the barrel capacity) and at the same time purge the screw until the mixture becomes cleaner.
- Purge out of the nozzle of the screw and load immediately after the PET-S the production PET in order to keep the screw always full of material
- Purge now again with production PET material in order to eliminate all rests.
- Now start new production

## **Instructions for use on INJECTION MACHINES (hot runners cleaning)**

- In case of colour change, mould neutral PET as long as performs with a lighter colour are produced (i.e. from red to light red, from dark blue to light blue).
- Make sure that there are no traces of colour inside the mixing unit and the hopper. Use compressed air to clean!
- Fill the necessary quantity of UP PET-S into the hopper (according to the dimensions and the conditions of the mould you will need from 5 to 30 kg).
- Do not empty the screw before and after loading ULTRA PLAST PET-S, otherwise the material can become too liquid.
- *Mould Ultra Plast PET-S as long as clean performs are produced:* 
  - This operation must be carried out carefully and watch whether there are NO performs or incomplete pieces of performs inside cavities.
  - You can extract the preforms made with Ultra Plast with a robot. If the machine is set with a very short cycle, you can increase the cooling time by 3-5 seconds, so that the robot can take the preforms from the mould easily.
  - The mould must be in good conditions, particularly as far as the valve closing is concerned, as otherwise it may happen that the purging compound flows out of the valve closings (the MFI of the PET-S is slightly higher than regular PET)
- After finishing the ULTRA PLAST PET-S you can immediately load the production PET
- start new production

## **Instructions for use on EXTRUDERS:**

- Run the machine with the neutral grade of a suitable plastic resin
- 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)
- If there are "deckles" on the two sides (on flat sheet machines), remove them or open at the maximum width.
- 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, when switching off temperatures of the machine (even if this procedure takes some time), fill the screw and barrel with purging compound and leave it during shut down of the machine.

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 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 1/19 of 30/01/2019

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

**1.1 PRODUCT IDENTIFIERS** 

PRODUCT NAME : ULTRA PLAST PET - S

**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.

ADDRESS: RUE DE L'ANCIENNE POINTE 30, 1920 MARTIGNY, SWITZERLAND

PHONE: +41 (0) 27 5653857

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

**1.4 EMERGENCY TELEPHONE NUMBER** 

EMERGENCY PHONE # : DOTT. PAOLO BALAGNA +41 787362642 MRS RENATE BEVER +41 795324381 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** 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 240°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 >190°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 ASPROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC. **REPRODUCTIVE TOXICITY** NONE SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE NONE SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE NONE 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 KNOWLEGE 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 PET. **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, 1272/2008 AND 453/2010.

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.

THE INFORMATION FURNISHED IN THIS MSDS IS NOT INTENDED TO CREATE ANY LIABILITY OF ANY KIND ON THE PART OF ULTRA SYSTEM SA. IN NO EVENT ULTRA SYSTEM SA WILL BE RESPONSIBLE FOR ANY DEATH, INJURY OR DAMEGE OF ANY NATURE RESULTING FROM THE USE OF RELIANCE UPON, OR MISURE OF THE MSDS OR MATERIAL TO WHICH IT REFERS. THE DATA ON THIS SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNED HEREIN.

THIS MSDS IS FURNISHED UNDER THE EXPRESS CONDITION THAT ALL PERSON RECEIVING IT WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR PURPOSE PRIOR TO USE. RESPONSIBILITY FOR THE COMPLIANCE WITH APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS CONCERNING DISSEMINATION OF THE MSDS AND SALE AND USE OF THE MATERIAL TO WHICH IT REFERS RESTSSOLELY UPON THE PURCHASER.