



## ***Purging Compounds***

### **Ultra PLAST HIGH-C**

**Ready to use Purging Compound**

***ULTRA SYSTEM***

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# ULTRA PLAST HIGH-C

## 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 the following resins: **PC-ABS-SAN-PMMA, PC/ABS, PS** etc.

**At a processing temperature ranging from 240° C to 320° C (464° 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:

### **ATTENTION! Do not use PE or PP as intermediate material!**

- Load screw, barrel with 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 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
- Load Ultra Plast (fill the barrel completely) and start injection purging cycle (IMPORTANT! Do not leave the purging compound longer than 2 minutes in the machine!)
- Continue with injection process with short shots until the ejected Ultra Plast appears visibly clean
- Load machine with the next production material and run machine (with normal processing values) to eliminate rests of Ultra Plast within the machine.
- Begin normal production

## Use for hot runner systems :

- The temperature of the dosing zone should be max. 280°C
- In case of colour change, mould neutral material long as the colour becomes lighter (i.e. from red to light red, from dark blue to light blue).
- 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.
- Fill the necessary quantity of UP HIGH-C into the hopper (according to the machine dimensions).
- **Decrease the temperatures of the hot runner to 260/265°C**
- Decrease injection pressure by half value
- Mould the HIGH-C at half injection pressure of production material as long as the moulded pieces are clean . **We advise to do this cleaning operation in “MANUAL » mode, continuously checking that there are no parts inside the mould before clamping !!**
- After processing the whole purging compound UP HIGH-C you can load the production material and start normal production
- **IT IS EXTREMELY IMPORTANT NOT TO LEAVE THE PURGE MATERIAL INSIDE THE HOPPER AND THE SCREW FOR MORE THAN 2 MINUTES MAX.!!**

### Use with Extrusion Machines:

- Run the machine with neutral plastic resin (**NO PP or PE**)
- 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)
- Load Ultra Plast and run machine at a 20-30° C increased temperature (if possible) The material must come out foamy otherwise reduce 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 is still coming out of the venting hole load it 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 1/15 of 07/01/2015

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

### 1.1 PRODUCT IDENTIFIERS

PRODUCT NAME : **ULTRA PLAST HIGH - C**

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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PHONE: +41 (0) 27 5653857

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 PARTICULAR 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

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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

**POTENTIAL HEALTH EFFECTS**

**INHALATION** NONE

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

**SKIN** NONE

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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.

THE INFORMATION FURNISHED IN THIS MSDS IS NOT INTENDED TO CREATE ANY LIABILITY OF ANY KIND ON THE PART OF ULTRA SYSTEM. IN NO EVENT ULTRA SYSTEM SRL 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.

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