



## ***Purging Compounds***

### **Ultra PLAST LP** **Concentrated Purging Compound**

***ULTRA SYSTEM***

ULTRA PLAST ASIA CO.,LTD.

55 Soi Onnut 17 Yak 3 Suanluang

Suanluang Bangkok 10250

Tel. (662) 337 3941 Fax (662) 337 3942

# ULTRA PLAST LP

**Concentrated Purging Compound for the mixture with production material**

Ultra Plast LP is a specific purging compound in liquid form which must be mixed with the processing material.

It is specific for the cleaning of endless screws, barrels, nozzles, hotrunners and extrusion heads to remove burnt material (colour) rests, deposits, incrustations and black specks during colour and/or material change of all thermoplastics .

**At a processing temperature ranging from 120° C to 400° 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 ,that will make the cleaning process quicker and easier during the next cleaning operation.

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 must be mixed in a ratio of 1-2 % concentrate and the rest of your production material.**

**Shake the product before usage:**

After use close the bulk carefully.

In case of hot runners, they should be cleaned after the cleaning of screw and barrel.

The purging compound Ultra Plast is made to pass also through the smallest holes of hot runner

### **Instructions for use with blowmolding machines:**

- Increase head temperature by 20-30°C (not strictly necessary but can give better results).
- In case of PVC or POM (or other materials that cannot support higher temperature) do not increase the temperatures as those materials do not support high processing temperatures.
- Mix the concentrated purging compound Ultra Plast LP in a ratio of 2 % with the neutral polymer (PE/HD or your production material)
- Load the prepared mixture Ultra Plast and start cleaning operation.
- Repeat the cleaning operation until the ejected mixture is sufficiently clean. Set temperatures of the head again to the original values.
- Pass through with neutral material (or production material) until all rests are eliminated.
- Start new production.

### **Instructions for use in extrusion machines:**

- Increase head temperature by 20-30°C (not strictly necessary but can give better results).
- In case of PVC or POM (or other materials that cannot support higher temperature) do not increase the temperatures as those materials do not support high processing temperatures.
- Mix the concentrated purging compound Ultra Plast LP in a ratio of 1 – 2% with the neutral polymer (PE/HD or your production material)
- Load the ULTRA PLAST mixture and run the machine
- If the purging material comes mainly out from the venting hole, it is necessary to increase the screw speed or try to close the venting. If the venting is connected with a vacuum pump, switch it off.
- Eject as long as the purging compound is visibly cleaner
- Load neutral or your production material, run the machine in order to eliminate all rests of the purging compound inside the machine
- Start new production

### **Use with Injection Moulding Machines:**

- Prepare the mixture of 2% LP in neutral production material
- Increase barrel temperature by 10-30°C; this operation is not strictly necessary but will help to obtain a better cleaning result. In case of PVC or POM (or other materials that do not support higher temperature) do not increase the temperatures as those materials do not support high processing temperatures.
- Load Ultra Plast LP mixture (fill the barrel completely) and start purging by ejecting the material
- Continue the purging process until the ejected mixture appears visibly clean
- Load machine with the next production material and run machine (with normal processing values) to eliminate all removed rests of Ultra Plast LP within the machine.
- Begin normal production

### **Use with Injection Moulding Machines and Hot Runners:**

**We recommend to clean the screw by purging from the nozzle before the hotrunners cleaning procedure, otherwise the colour residuals and the black spots in the screw can contaminate the hot runners.**

- Prepare the mixture of 2% LP in neutral production material
- Increase hotrunners' temperature as much as possible (up to 300°C - 572°F) according to the processed material (attention with PVC and POM or other materials which do not support high temperatures). As this operation takes some time it should be done immediately
- Load Ultra Plast mixture 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 and the hotrunners' type) until the moulded parts appear visibly clean.
- When the moulded parts are almost clean, stop the machine cycle for not longer than 2-3 minutes and then continue to process. (This operation is not strictly necessary) .
- If the moulded pieces are clean, start the new production; if the pieces should come out with colour stripes (that means not yet perfectly clean) charge some more Ultra Plast mixture (approx. from 1 to 2 kg according to machine dimension) and mould it.
- When the moulded part is visibly clean load the production material or the neutral material and begin normal production

**ATTENTION!!!!!! Do not use the concentrated purging compound in higher percentage as indicated!**

# MATERIAL SAFETY DATA SHEET

ISSUE 1/15 of 25/02/2015

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

### 1.1 PRODUCT IDENTIFIERS

PRODUCT NAME : **ULTRA PLAST LP**

**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 SA

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

PHONE: + 41(0)275653857

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

### 1.4 EMERGENCY TELEPHONE NUMBER

EMERGENCY PHONE # : DOTT. PAOLO BALAGNA +39 330 595553

## 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

**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

WHEN MIXED WITH POLYMERS 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

Rev..07/02/2018

STORE IN A COOL AND DRY AREA, NORMALLY VENTILATED MAKE SURE THAT THE BOTTLE IS CLOSED AFTER TAKING OF QUANTITY NECESSARY FOR MORE OR LESS IMMEDIATE USE.

**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: LIQUID - COLOUR: WHITE - LIGHT YELLOW-GREY

B) ODOUR : LEMON FLAVOUR

C) ODOUR THRESHOLD ----

D) PH N.A.

E) MELTING POINT FROM -15°C

F) INITIAL BOILING POINT AND BOILING RANGE 190°C.

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 1.20 G/CC

N) WATER SOLUBILITY : COMPLETE WATER SOLUBILITY

O) AUTOIGNITION TEMPERATURE >450 °C

P) DECOMPOSITION TEMPERATURE >85°C

R) VISCOSITY 365 CENTISTOKES @25°C

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

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**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 FOR EVERY 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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