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## Technical Data Sheet

# XTEND<sup>®</sup> UMS CONC Mold Sealer

### Product Description:

Proprietary resin solution comprising modified siloxane-based polymers which crosslink and form a release film upon evaporation of the solvent carrier. Semi-permanent mold sealer.

### Composition:

Proprietary resin solution in aliphatic solvent blend.

### Uses:

Mold sealer for FRP and metal tooling for most thermoset resin systems. Especially suited for polyester resins, such as: Iso, ortho, DCPD, and PET, as well as vinyl-ester resins and cyanate ester.

### Handling:

MOISTURE SENSITIVE.  
KEEP TIGHTLY SEALED.

CAUTION: Apply at ambient temperature, ideally above 65°F/18°C.

DO NOT APPLY TO HOT MOLDS (OVER 350°F/177°C).

Minimize exposure to atmosphere.

Do not return exposed material to can.

Store above freezing and below 100°F/38°C.

### Diluting XTEND UMS CONCENTRATE

The following instructions will provide a table for diluting the UMS concentrate. Distributor Dilution instructions: 1:9 dilution

### XTEND UMS – Batch Size 140 kg

TABLE #1 – XTEND UMS (140kg Drum)				
Ingredient	%	Amount (kg)	PPM (water)	Lot #
Isopar E or Equivalent	10	14		
Isopar G or Equivalent	40	56		
OMS or Equivalent	40	56		
UMS CONC	10	14		
<b>Total</b>	100	140 kg		

### Safety

- Ground drums using grounding clamps, connecting raw material drum to finished product drum.
- Respirators and nitrile gloves.
- Goggles.

### Dilution procedure using TABLE #1.

1. Check availability of all raw materials.
2. Take sample of Isopar E from the drum and n-butyl ether and submit a properly labeled sample to qc lab for moisture analysis. Report value on this batch.

Isopar E moisture = \_\_\_\_\_ ppm

Isopar G moisture = \_\_\_\_\_ ppm

If moisture is out of specification (>40 ppm), dry with molecular sieve. Recheck moisture and report value after drying.

New Isopar E moisture = \_\_\_\_\_ ppm

New Isopar G moisture = \_\_\_\_\_ ppm

Be sure all solvents are within specification before proceeding.

QC initials: \_\_\_\_\_

**Note:** Make sure to inert the drum with nitrogen after every additional step.

### FEATURES:

Wipe-on/wipe-off mold sealer.	Offers extra mold protection and enhances mold release performance.
Especially for new, green, or recently compounded FRP molds.	Also recommended for treating mold repair areas.

### TYPICAL PROPERTIES:

<b>COLOR</b>	Straw
<b>SPECIFIC GRAVITY</b>	0.80-0.82
<b>VISCOSITY</b>	<15 cps @ 25 ° C
<b>SOLVENTS</b>	Aliphatic Hydrocarbons
<b>FLASH POINT</b>	89.6° F / 32° C
<b>SHELF LIFE</b>	12 months in original unopened package
<b>PACKING</b>	Metal containers

3. In a new 55 gal closed head metal drum charge the Isopar G, Isopar E, and Odorless Mineral Spirits (OMS).
4. Charge the UMS concentrate and re-inert the drum with nitrogen.
5. Place drum on tumbler and mix for 2 hours.
6. Take a sample and submit for QC approval.
7. Once approved, properly label the drum with name and lot number.

for 1-2 two minutes and allow the surface to dry further. Any streaks should now wipe off easily.

- 4) If any streaks remain after the above step, simply re-wet the streaked area with UMS Mold Sealer and wipe the area vigorously, then wipe off with a second, dry cloth.

Quality Control for UMS		
Testing	Specifications	Result
Specific Gravity	0.740-0.760	
Solids	1.7-2.5%	
Color	Straw	

### **Application Instructions:**

#### **Application**

Apply 1-3 coats of UMS Mold Sealer allowing approximately 15-20 minutes between each coat. New molds or porous surfaces may require additional coats. Increased cure times are recommended for mold temperatures below 68°F(20°C).

#### **Application Method**

- 1) Apply to ambient temperature molds by wiping with a clean, woven, paper cloth such as the Scott Shop Towels-On-A-Roll®, Kimberly-Clark WorkHorse® rags or WypAll® wipes, or a heavy-duty plain white paper towel. 100% bleached white, cotton cloths can also be used.
- 2) Work in patches, applying a smooth, continuous light film over an area approximately 4'-6' (0.3-0.8m<sup>2</sup>) square, or a size that you can conveniently wipe before it dries. A nice wet coat should be applied, but without runs, puddles, or drips.
- 3) As the sealer starts to flash off (3 seconds to 3 minutes), use a clean, dry paper cloth, or cotton cloth to wipe the surface to a shine. This is done in three steps.
  - a) Starting from the outside of the wet-out area, and working towards the center, wipe over the area once.
  - b) Flip the cloth over to a dry side
  - c) Wipe over the surface again using a hand waving motion.

Firm, strong pressure is not necessary for a streak free, high gloss cosmetic (shine). It is recommended to wave or wipe off one to two times. If any streaks remain, stop wiping

#### **Cure**

Allow the coated mold to cure for 30 minutes minimum at ambient temperature before applying release. Longer cure times should also be considered for new or repaired molds. Overnight cure for new molds is ideal. Air movement is suggested for high humidity environments.

#### **Removal**

May be removed by abrading (polishing) or, if chemical removal is preferred, XTEND CX-200HS Mold Stripper or XTEND WCX water-based Mold Stripper are recommended.

\* Due to the unique properties of this material, we require a clean closed application container. The container we find best suited is an HDPE bottle with a shampoo squeeze style cap, where only a small amount of air is transferred. Gallons should be transferred into the type of container described above. At your request we can supply a sample and source. Drum quantity customers are required to use a desiccant drier attachment to assure proper release performance.