How UCON™ PREP works in your process

UCON™ PREP is a preformed powder that can replace the in-situ thickener production process.

**Time stamp process**

**7:48 AM**
Added 430.9 grams of group II mineral oil fluid to reactor. The agitation rate was set at 150 RPM. The bath temperature was set to 80°C, and the wrap insulation was applied. A nitrogen purge was also started.

**8:40 AM**
Internal temperature at 80°C, began addition of 61.9 grams of UCON™ PREP-2 (dried and ground). Agitation rate set at 250 RPM.

**8:54 AM**
Addition complete, agitation rate was at 250 RPM. Increased bath temperature to 160°C.

**9:45 AM**
Internal temperature at 160°C, set agitation rate to 150 RPM.

**11:45 AM**
Set bath temperature to 180°C, agitation rate at 150 RPM.

**12:35 PM**
Added 430.9 grams of group II mineral oil fluid to reactor. The agitation rate was set at 150 RPM. The bath temperature was set to 80°C, and the wrap insulation was applied. A nitrogen purge was also started.

**1:05 PM**
Set bath temperature to 50°C to cool, turned agitation off. Let cool overnight.

Sample procedure to prepare grease from UCON™ PREP-2

Preparing a grease at 12.5 wt% thickener loading

**Batch contents**
Group II mineral oil: UCON™ PREP-2 polyurea grease thickener powder

**Equipment**
1L glass jacketed reactor, with agitation, nitrogen purge and appropriate oil for heating

**Total batch size**
~492 grams (430.5 grams group II mineral oil, 61.5 grams of UCON™ PREP-2)

Contact our technical expert, lmhuffman@dow.com for questions, customizations, or troubleshooting.