

## QUESTIONNAIRE HIGH VISCOSITY TECHNOLOGY

The following information will enable us to establish the needs necessary in attaining the correct choice of the high viscosity technology and allow us to follow through with the precise testing required.

Product / Project : .....

(Key words) .....

Process:       Devolatilization    Concentration    Reaction    Resources Recovery

Shall your application be treated in strict confidence:    yes       no

Company's name: .....

Departement: .....

Adress: .....

Person in charge of the project: .....

Phone No.: .....

Fax No.: .....

E-Mail: .....

Date: .....

Signature of interested party: .....

**1. Composition**

1.1 Designation of high viscosity component(s): .....

1.2 Designation of volatile component(s): .....

**2. Feed**

2.1 Composition..... in % by weight

2.2 At what temperature is the product available .....°C and .....bar g

2.3 The viscosity under these conditions is .....Pa.s

2.4 Further remarks .....

.....

**3. Product**

3.1 Desired residual content of volatiles ..... in % by weight

3.2 The product is  thermoplastic  elastic .....

3.3 Highest allowable temperature,  
to which the product may be exposed up to a max. of 3 min. max .....°C

3.4 Further remarks .....

.....

**4. Destillate**

4.1 Required purity .....

4.2 Further remarks .....

.....

**5. Process, utilities, materials of construction**

5.1 Required throughput (product basis)..... kg/h

5.2 Operation prior to this stage.....

.....

5.3 Operation subsequent to this stage.....

.....

5.4 Is the process:  developed ready for production  developed for pilot plant

- 5.5 Utilities available: .....
- 5.6 Saturated steam ..... bar g ..... Hot oil .....
- 5.7 Cooling water ..... ° C ..... Brine .....
- 5.8 Electrical characteristics Phases: ..... Cycles: ..... Voltage: .....
- 5.9 Exproof class .....

5.10 Materials of construction  
Construction material of our standardized evaporators is stainless steel DIN 1.4404 (316L) for parts in contact with product. Does this meet your requirements?  yes  no  
If not, which material is recommended .....

Which materials are suitable for seals/gaskets? .....

5.11 Further remarks .....

.....

**6. Product trials**

- 6.1 Product trials in Laboratory  yes  no
- 6.2 Are special precautions to be taken in the storing, handling or shipping of the product:  no  yes, which? .....

**7. Test material**

- 7.1 What product quantity can be furnished for trials:  
 2.000 kg  1.000 kg  ..... kg
- 7.2  The feed product will be furnished in its initial composition  
 The feed product will be furnished in its separate components (Supply in initial composition is favourable)
- 7.3 Composition (in % by weight).....
- 7.4 At room temperature the feed is:  thin liquid  viscous liquid?
- 7.5 Viscosity ..... Pa.s at ..... °C
- 7.6  solid  pellets  other consistency: .....
- 7.7 If the feed or the components are solid at room temperature, what is the melting temperature: ..... °C
- 7.8 Must the product be returned after trials .....  yes  no  
solvent to be disposed after the trial: .....  yes  no

**8. Product samples**

8.1 Desired quantity of product samples ..... per sample

8.2 Product samples:

- must be taken under a nitrogen blanket
- should be discharged through a water bath
- can be discharged into atmospheric receivers
- must be in form of pellets

8.3 Analysis:      Drying oven..... mbar .....°C .....h

8.4 Further method: ..... (please enclose specification)

8.5 Further remarks: .....  
.....

8.6 Safty data sheet No.:.....

**Please enclose further data, diagrams, etc. if available**

**Physical data**

		High viscosity Components	Solvent Components	
			Component 1	Component 2
Chemical formula/name				
Molecular weight	kg/kmol			
Latent heat of evaporation	kJ/kg			
Specific heat (20 °C)	kJ/kg °C			
Boiling point at atm. pressure	°C			
Vapor pressure in mbar	at ..... °C			
	at ..... °C			
	at ..... °C			
	at ..... °C			
Melting point	°C			
Density	kg/m <sup>3</sup>	( °C)	( °C)	( °C)
Flashpoint	°C			
Lower ignition limit	Vol.-%			
Ignition temperature	°C			
resp. temperature class				
MAK	ppm			
Is the product:	toxic			
	caustic			
	inflammable			
	explosive			

## Process data High Viscosity-Technology

