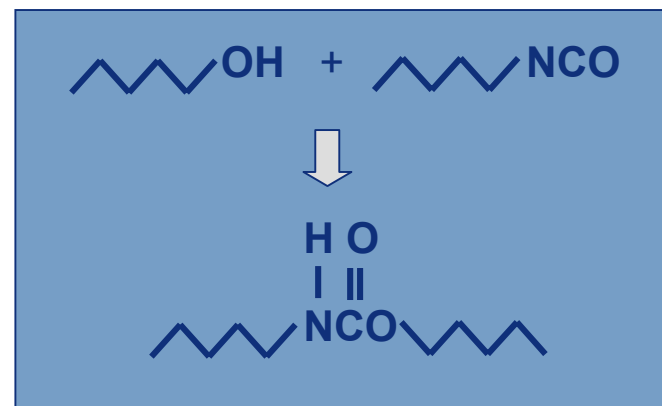
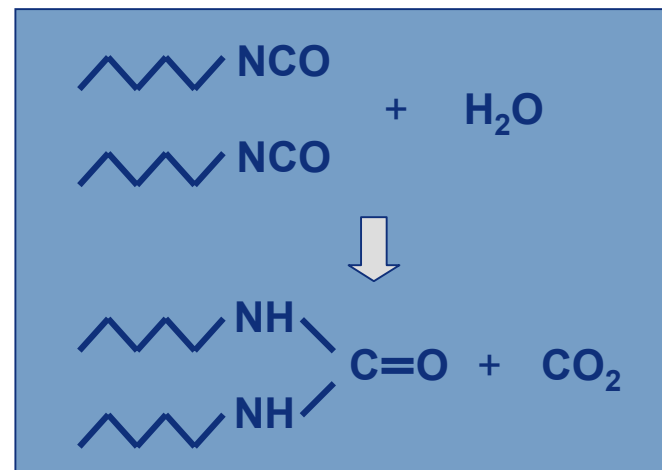


Introduction to DD-systems

- Two - component system



- One - component system



Introduction to DD-systems: Desmodur Hardeners

Advantages:

high reactivity, cost effective

Disadvantages:

short pot life, poor light stability

=> Development of
Aliphatic Polyisocyanates

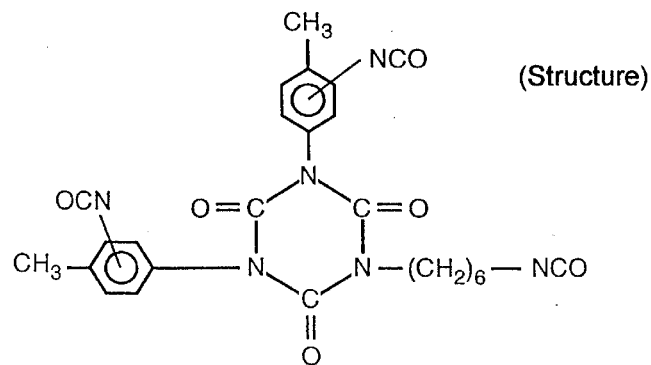
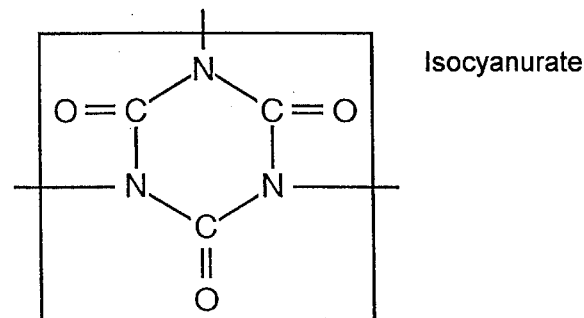
First step:

mixed TDI/HDI type

compromise in price
and light stability

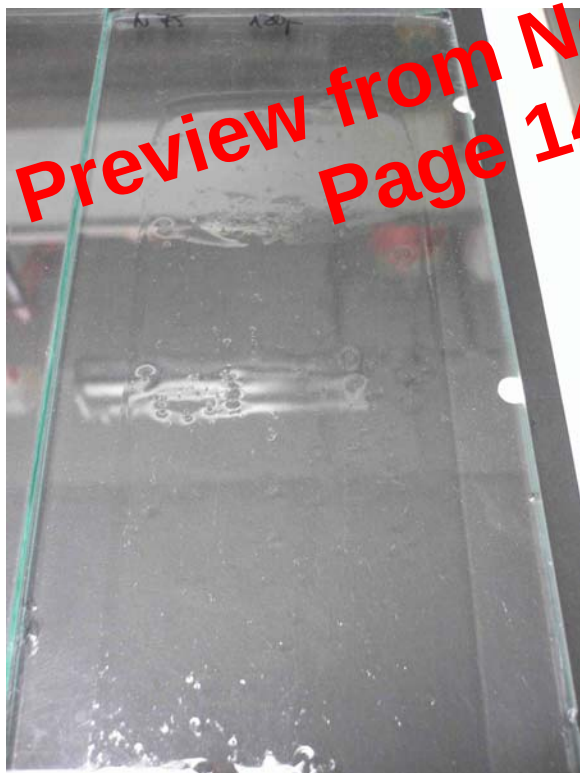
Polyisocyanate
HDI / TDI-Isocyanurate-type

Desmodur IL

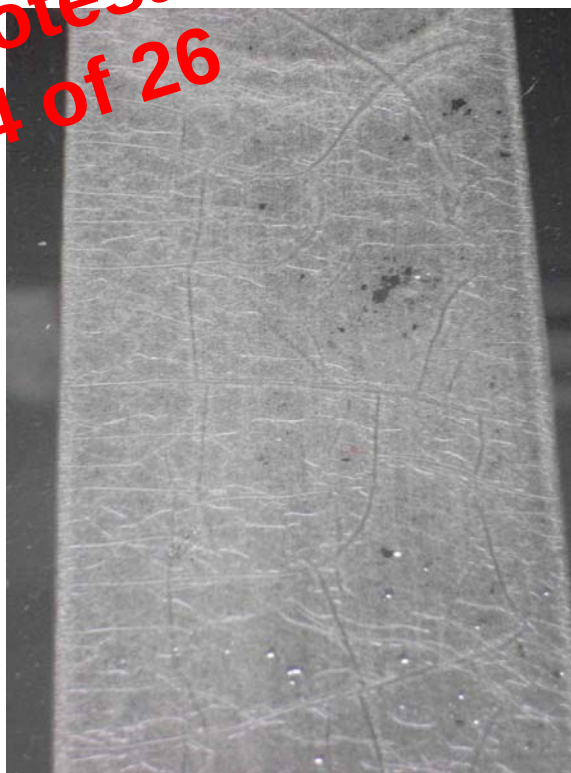


Polyisocyanates for wood coatings

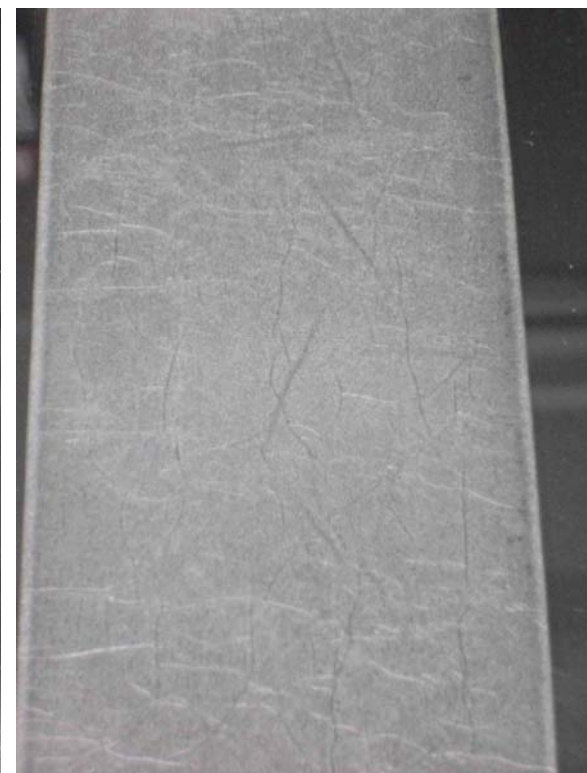
Physical Drying of different Polyisocyanate Hardeners



Desmodur HL



Desmodur IL 1451



Desmodur IL 1351

Comparision of Desmodur IL types

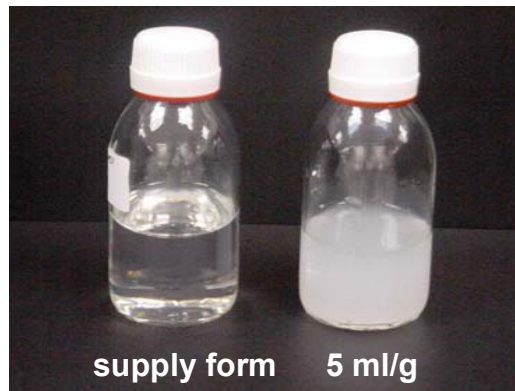
Desmodur		IL	IL 1351	IL 1451
Toluene-compatibility (ml Toluene /gPIC)		1,5	1,3	5
Compatibility with YC LS 2718 (TU/F)*		19	16	8
Compatibility with 10% NC E 510 (TU/F)*		>>100	>>100	8
Drying with Desmophen RD 181 (min.)		110	120	150
Pendulum hardness after 2h / 8h (sec.)		45 / 131	42 / 131	26 / 105

* = Tubidity unit / Formazin

PIC Standard



Desmodur IL 1451



Combinations with NC /CAB => faster drying:

**NC: cost effective
faster drying**

**CAB: light stable
better matting**

Bayer **MaterialScience**