

# **Polyurethane dispersions**

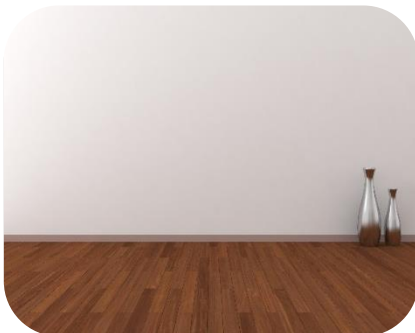
**Combining high performance with environmental friendliness**

**American Coatings Show 2016**

Henrik Bernquist

PUD segment manager

# Where are PUD's used?

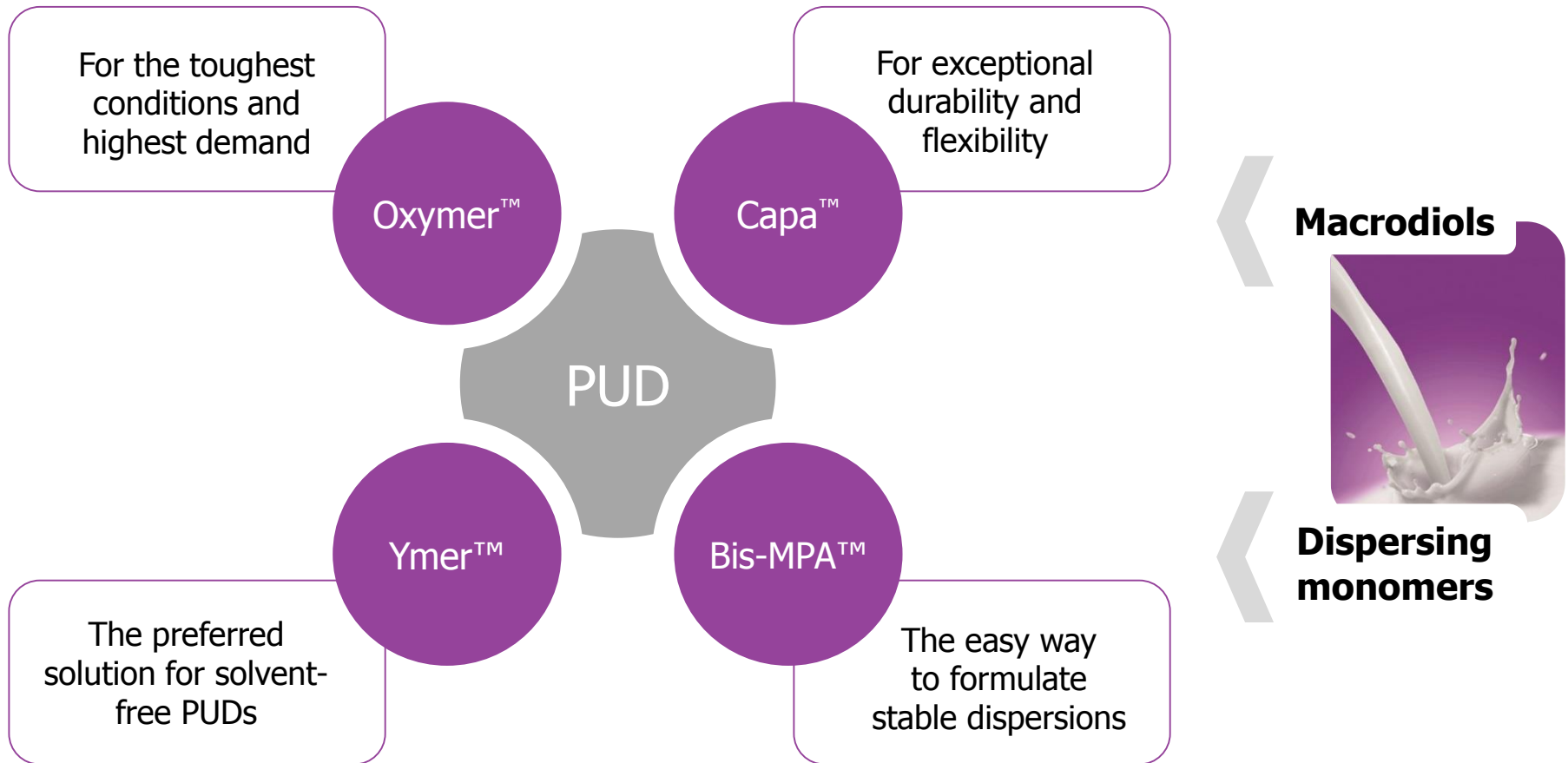


# Polyurethane dispersions - Limitless formulation freedom

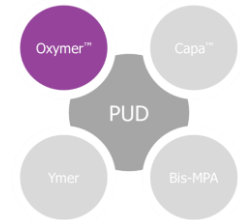
- ➔ Extremely versatile, high performing coating systems
- ➔ Enables customization such as durability, hardness and flexibility
- ➔ Low environmental impact due to low VOC content and dispersion in water



# Perstorp's product range for PUDs

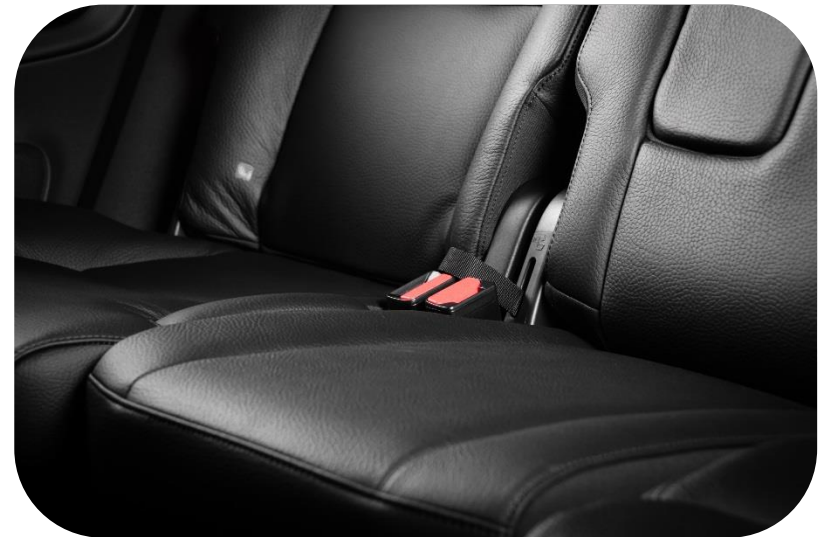


# Oxymer™ HD



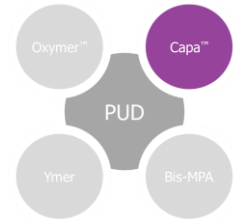
## Benefits

- ➔ Polycarbonate diols
- ➔ For demanding applications
- ➔ Excellent outdoor and UV resistance
- ➔ Chemical and hydrolytical resistance
- ➔ Available in different molecular weights
- ➔ Excellent strength and flexibility



For the most demanding applications and toughest conditions

# Capa™ Polycaprolactones



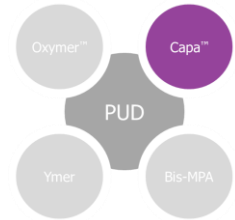
## Benefits

- ➔ Very high flexibility even at low temp
- ➔ Good hydrolytic stability
- ➔ Ease of processing and low viscosity
- ➔ Abrasion resistance
- ➔ Improved impact resistance
- ➔ For leather that lasts and look good

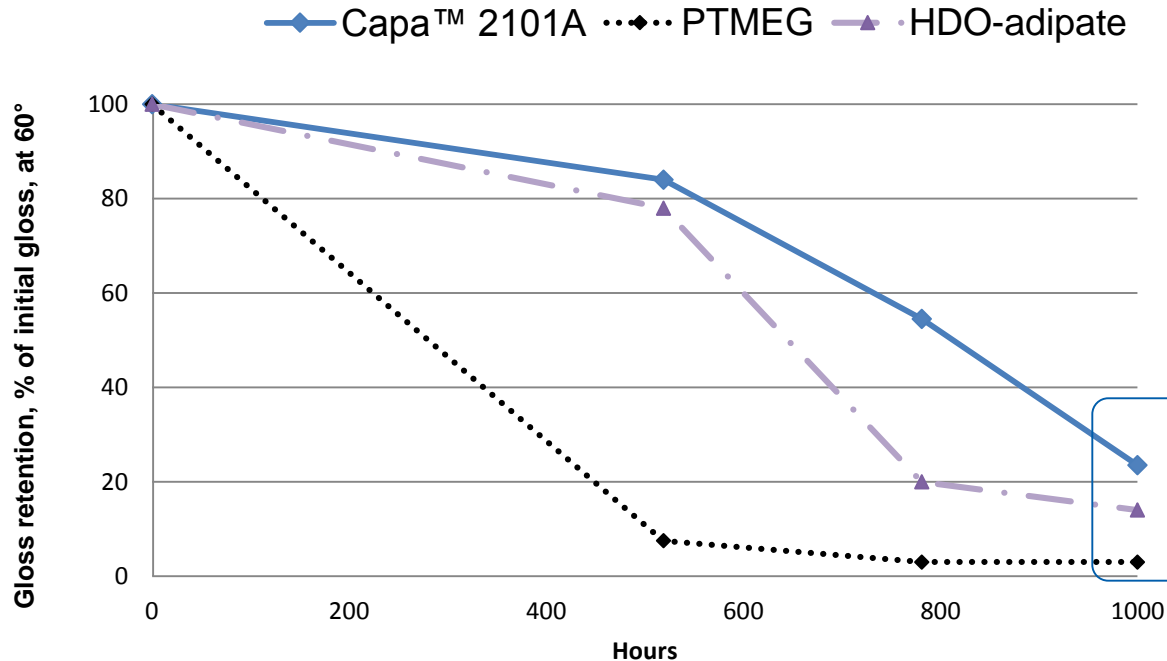


Ideal for tailor-made solutions with unique properties

# Capa™ - highest gloss retention



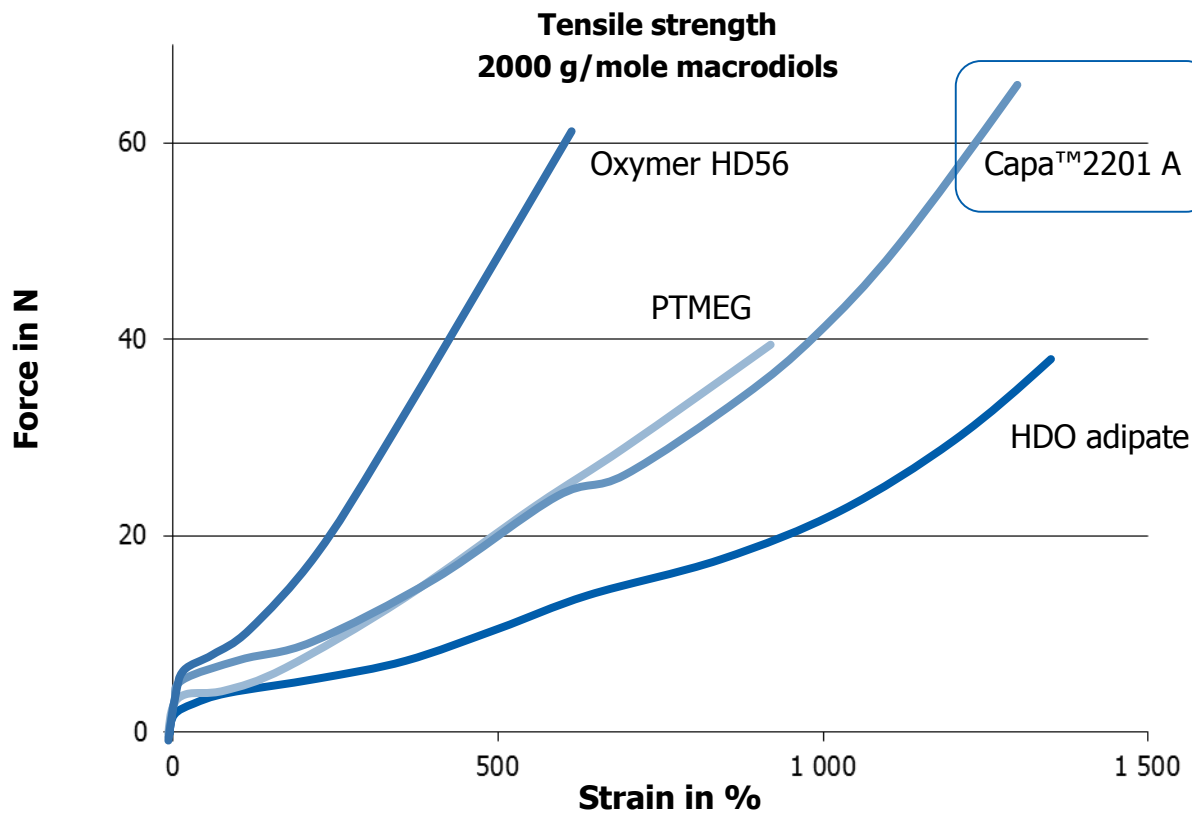
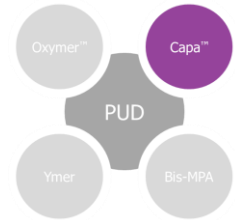
**Accelerated weathering**  
QUV-B on crosslinked PUDs  
1000 g/mole macrodiols



Best-in-Class  
Outdoor durability

Cycle : succession of 4 hour periods of UV-B exposure at 60°C each followed by 4 hour periods of condensation at 40 ° C

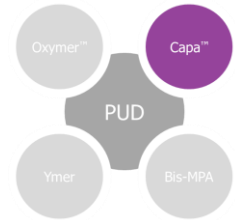
# Capa™ - 1300 % elongation



Combines good tensile strength with high flexibility

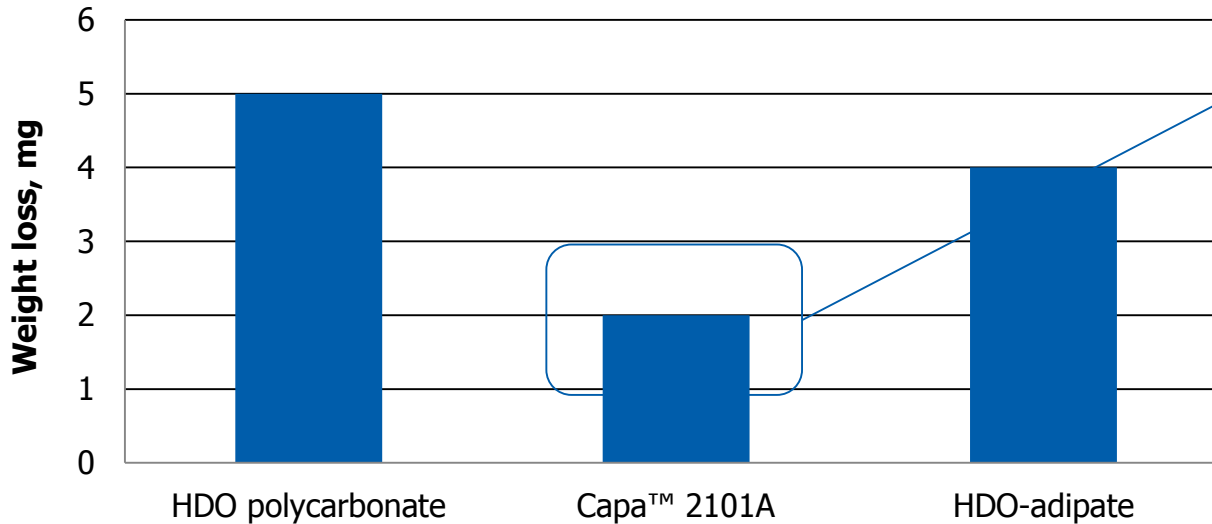


# Capa™ for long lasting coatings



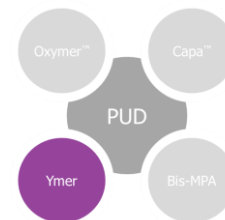
Capa™ provides superior abrasion resistance

**Taber abrasion for crosslinked PUDs  
1000 g/mole macrodiols**



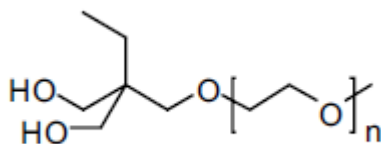
Twice as good as  
polyester based

# Ymer™ N120



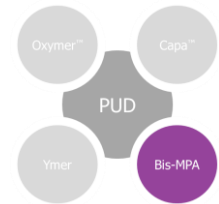
## Benefits

- ➔ pH and salt stability
- ➔ Increased freeze/thaw stability
- ➔ Solvent resistance
- ➔ Flexibility
- ➔ Enables solvent free PUDs



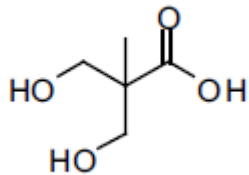
A nonionic dispersing monomer for no/low solvent PUDs

# Bis-MPA™



## Benefits

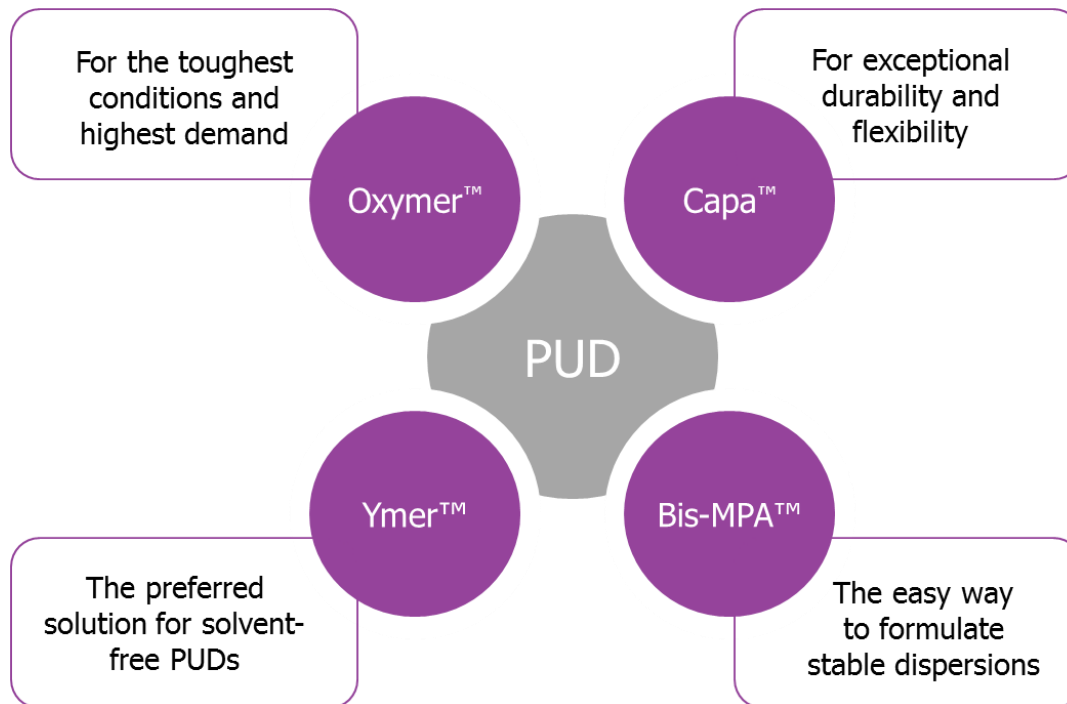
- ➔ Easy to formulate stable dispersions
- ➔ Low amounts needed in formulations
- ➔ Low water sensitivity
- ➔ Very low toxicity



The key raw material for anionic polyurethane dispersions

# Your polyurethane partner

- ➔ Perstorp offers reliability and technical knowledge
- ➔ Broad portfolio of products for durable, high performing and environmentally friendly solvent free PUDs
- ➔ Wide range of products for fine-tuning properties and end application performance



# Q&A

Welcome to booth 2855!