versalis innovation in portfolio

DUTRAL®: development of a new catalyst system

After years of internal development versalis is ready to scale up an improved Z-N catalyst



Traditional Catalyst System: very versatile, able to produce from very low to very high Molecular Weight, from low to high Ethylene and ENB content

The **New Catalyst System** keeps the versatility of the traditional one, significantly increases the polymerization yield, improves undesiderable addition to obtain better distribution inside the polymer chain, reduces undesiderate side reactions



- Higher polymerization yield
 - Cleaner products



- Better monomer distribution and side reactions control
 - Lower up to no gel
 - Better consistency
 - Better curing efficiency

Widening the polymer design

- New polymer structures
- Improved processability

This new catalyst is currently under intensive test on industrial scale

O DUTRAL: development of new grades

Dutral® TX 1301 (D. TER 4548)

- The highest MW Dutral grade
- 100 phr of highly purified paraffinic oil
- FDA complaint
- Developed for TPV applications

Dutral® TX 1401 (D. TER 8148)

- Very High ENB content (8,5%)
- · High MW
- Amorphous grade
- Developed for Auto Sponge **Profiles** applications

Dutral® TX 1501 (D. TER 7040)

- High ENB content (6,5%)
- · High MW
- · Dry Amorphous grade
- · Developed for GP highly filled profiles









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