# K-Fair 2010 Medical

**Medical Empera 116N in breakthrough technology for petri dishes at Engel booth**

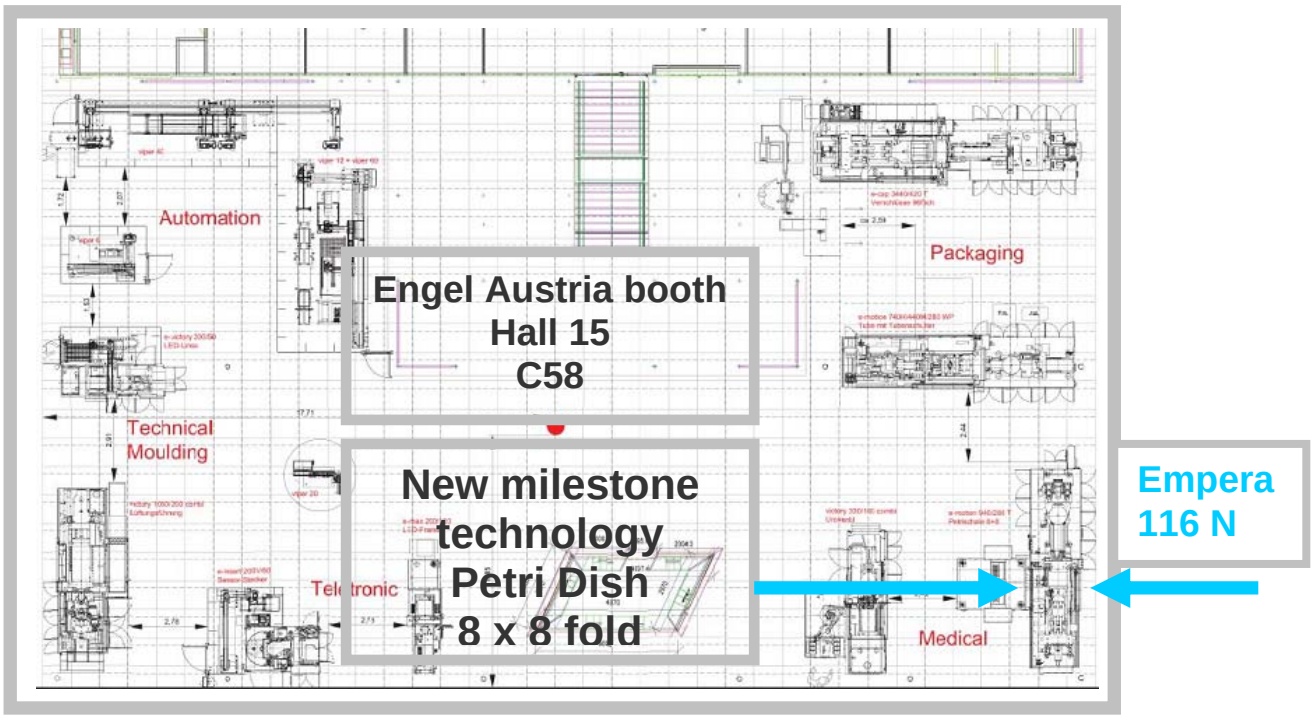
## Empera 116N - for medical petri dishes in milestone technology by Engel

Empera 116 N is the medical product of choice in a milestone technology in the manufacturing of petri dishes by Engel Austria.

This new technology is located at the Engel Austria booth in hall 15 booth C58.

Press announcements for the new technology have been done by Engel.

The machine will run continuously on all days of the fair.




| Product | MVR ($cm^3$/10 min) | Vicat temp ($^oC$; B/50) |
|---|---|---|
| Empera 116N | 23 | 85 |

### Technical Support


| | | |
|---|---|---|
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| D-A-CH, CEE, Scandinavia, Netherlands: | Klaus Terlau | Klaus.Terlau@ineos-nova.com |


**Website Product Link: www.ineos-nova.com → Products → Polystyrene PS → Europe → 116N**

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## Polystyrene, NAS®, Zylar® and NK - The medical product portfolio of INEOS NOVA

**Polystyrene (PS) grades**
Highly transparent, general purpose Polystyrene (GPPS) or opaque, high impact Polystyrene (HIPS). Both GP and HIPS grades meet the standard requirements for medical applications.

**NAS® (SMMA) grades**
Styrene – Methyl Methacrylate copolymers with extremely high transparency and neutral water clear colour. Outstanding optical properties

**Zylar® (MBS) grades**
Transparent Styrenic copolymers with excellent clarity combined with high impact resistance and easy processing properties, for high end medical devices.

**NK (SMMA/SBC) dry blends**
Easy-to-process Styrenic copolymers that offer the lowest cost solution combining transparency with impact resistance for medical applications

## PS, NAS®, Zylar® and NK at-a-glance

very good processing, easy colouring
no pre-drying, low moisture absorbance
neutral transparency, no tint (NAS)
glass look-alikes (GPPS & NAS)
low processing temperatures
wide processing window
density advantages
lower energy cost
very good recycling property retention
alcohol and blood lipid resistance
food approval EU and FDA
Pharmacopeia & USB IV, VI for NAS® & Zylar®
Gamma, ETO and E-beam sterilisation
laser engraving and ultrasonic welding
supports micro-structuring of surfaces
gluing with soft-PVC possible

**Typical Medical Applications for INEOS NOVA Styrenic products:**
Blood filters/centrifuges, Petri-dishes, cell growth bottles and flasks, high-throughput screening devices, syringes, caps, valves, lenses for optical surgery, micro-titration plates, micro-structured surface diagnostic devices, tracheotomy surgery, short- term implantation respiratory devices, etc.

| The INEOS NOVA Medical Product Portfolio | | | | | |
|---|---|---|---|---|---|
| **Selection of Polystyrene grades** | | | **Selection of Styrenic copolymer specialties** | | |
| **Gpps grades** | MVR ($cm^3$/10 min) | Vicat temp ($^oC$; B/50) | **Crystal SMMA grades** | MVR ($cm^3$/10 min) | Vicat temp ($^oC$; B/50) |
| **E 116N/L** | 23 | 85 | **NAS® 21** | 2.0 | 98 |
| **E 124N/L** | 12 | 87 | **NAS® 30** | 2.3 | 98 |
| **E 251N/L** | 2.4 | 101 | **NAS® 36** | 2.3 | 98 |
| **E 350N/L** | 1.5 | 101 | **NAS® 90** | 1.6 | 89 |
| **Hips grades** | MVR ($cm^3$/10 min) | Vicat temp ($^oC$; B/50) | **Impact MBS grades** | MVR ($cm^3$/10 min) | Vicat temp ($^oC$; B/50) |
| **E 416N** | 21 | 81 | **Zylar® 220** | 5.0 | 77 |
| **E 524N** | 10.5 | 85 | **Zylar® 530** | 5.3 | 72 |
| **E 542N** | 4.1 | 92 | **Zylar® 631** | 6.1 | 74 |
| **E 622N** | 4.8 | 89 | **Dry blend NK55** | 8.0 | 75 |


**Technical Support**

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**Website Product Link: www.ineos-nova.com →Products→Performance Products→ NAS & Zylar or NK**