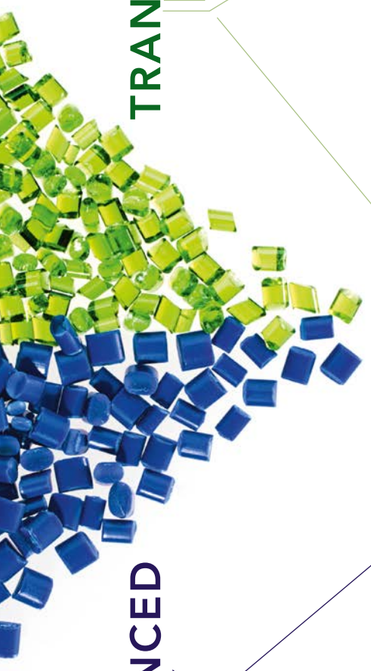
# SPECIALTIES PORTFOLIO

Versatility. Performance. Endless possibilities.


INEOS STYROLUTION

Driving Success. Together.



## TRANSPARENT STYRENIC SPECIALTIES

### TRANSPARENT

| | | | |
|---|---|---|---|
| **STIFFNESS** | DIMENSIONAL STABILITY<br>HEAT RESISTANCE<br>CHEMICAL RESISTANCE | **LURAN®**<br>**LURAN® HH** | **LURAN** IS INEOS STYROLUTION'S STYRENE ACRYLONITRILE COPOLYMER (SAN)<br>**LURAN HH** IS INEOS STYROLUTION'S ALPHA-METHYLSTYRENE ACRYLONITRILE (AMSAN) COPOLYMER |
| | TRANSPARENCY<br>FLOWABILITY<br>FOR MEDICAL USE | **NAS®** | **NAS** IS INEOS STYROLUTION'S TRANSPARENT STYRENE METHYL METHACRYLATE (SMMA) COPOLYMER |
| **IMPACT RESISTANCE** | TRANSPARENCY<br>CHEMICAL RESISTANCE<br>RIGIDITY, STIFFNESS<br>FOR MEDICAL USE | **TERLUX®** | **TERLUX** IS INEOS STYROLUTION'S METHYL METHACRYLATE ACRYLONITRILE BUTADIENE STYRENE (MABS) COPOLYMER |
| | TRANSPARENCY<br>FLOWABILITY | **ZYLAR®** | **ZYLAR** IS INEOS STYROLUTION'S METHYL METHACRYLATE BUTADIENE STYRENE (MBS) POLYMER |
| | HIGH FLOW<br>EXCELLENT CHEMICAL RESISTANCE<br>TRANSPARENCY | **CLEARLUX®** NEW! | **CLEARLUX** IS INEOS STYROLUTION'S METHYL METHACRYLATE ACRYLONITRILE BUTADIENE STYRENE (MABS) COPOLYMER |
| | TRANSPARENCY<br>LOW TEMPERATURE TOUGHNESS<br>FLOWABILITY<br>RIGIDITY, STIFFNESS | **STYROLUX®***<br>**K-RESIN®** | **STYROLUX*** AND **K-RESIN** ARE INEOS STYROLUTION'S THERMOPLASTIC TRANSPARENT AND IMPACT RESISTANT STYRENE BUTADIENE BLOCK COPOLYMERS (SBC) |
| | LOW TEMPERATURE TOUGHNESS<br>FLOWABILITY<br>TRANSPARENCY | **STYROFLEX®*** | **STYROFLEX*** IS INEOS STYROLUTION'S THERMOPLASTIC ELASTOMER, A STYRENE BUTADIENE BLOCK COPOLYMER (SBC) WITH TAILOR-MADE ARCHITECTURE |

*Available also as bio-attributed ECO grades

## ENHANCED STYRENIC SPECIALTIES

### ENHANCED

| | | | |
|---|---|---|---|
| **IMPACT RESISTANCE (ABS)** | FOR MEDICAL USE<br>CHEMICAL RESISTANCE<br>FLOWABILITY & HIGH GLOSS<br>ELECTROPLATING | **NOVODUR®** | **NOVODUR** IS INEOS STYROLUTION'S SPECIALTY ACRYLONITRILE BUTADIENE STYRENE (ABS) COPOLYMER |
| | ELECTROPLATING<br>HEAT RESISTANCE<br>DIMENSIONAL STABILITY<br>LOW EMISSION & FLOWABILITY | **NOVODUR® HIGH HEAT** | **NOVODUR HIGH HEAT** IS INEOS STYROLUTION'S ENHANCED HEAT RESISTANCE SPECIALTY ACRYLONITRILE BUTADIENE STYRENE (ABS) COPOLYMER |
| **UV RESISTANCE (ASA)** | IMPACT STRENGTH & FLOWABILITY<br>CHEMICAL RESISTANCE<br>HEAT RESISTANCE<br>DIMENSIONAL STABILITY | **LURAN® S** | **LURAN S** IS INEOS STYROLUTION'S ACRYLONITRILE STYRENE ACRYLATE (ASA) COPOLYMER |
| | LONG TERM PROPERTY RETENTION<br>IMPACT STRENGTH<br>FLOWABILITY<br>HEAT RESISTANCE | **LURAN® SC** | **LURAN SC** IS INEOS STYROLUTION'S BLEND OF ACRYLONITRILE STYRENE ACRYLATE COPOLYMER AND POLYCARBONATE (ASA/PC) |
| **PHYSICAL AND MECHANICAL STRENGTH** | FLOWABILITY<br>DIMENSIONAL STABILITY<br>LOW GLOSS<br>CHEMICAL RESISTANCE | **TERBLEND® N/S** | **TERBLEND N** IS INEOS STYROLUTION'S ACRYLONITRILE BUTADIENE STYRENE COPOLYMER BLEND WITH POLYAMIDE (ABS/PA)<br>**TERBLEND S** IS INEOS STYROLUTION'S ACRYLONITRILE STYRENE ACRYLATE COPOLYMER BLEND WITH POLYAMIDE (ASA/PA) |

# CLEARLUX®

Clearlux 816 is a methyl methacrylate acrylonitrile butadiene styrene polymer. The grade offers a unique combination of excellent flow, high impact strength, heat resistance and good colourability.

| | PROPERTIES | | | PROCESSING | | | | | MECHANICAL | | | | | THERMAL | | | OPTICAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Polymer abbreviation | Density | Water absorption, saturated at 23 °C | Method: injection moulding (M), extrusion (E), blow moulding (B) | Melt Volume Rate (220 °C / 10 kg) | Melt temperature range | Mould temperature range | Mould shrinkage range | Tensile modulus | Tensile stress at yield, 23 °C | Tensile strain at break, 23 °C | Charpy notched impact strength (23 °C) | Hardness, ball indentation | Heat deflection temperature, HDT A (annealed 4h/80 °C; 1.8 MPa | Heat deflection temperature, HDT B (annealed 4 h/80 °C; 0.45 MPa) | Vicat softening temperature, VST/B/50 | Light transmission (4 mm thickness) | Haze (4 mm thickness) | Refractive index (nD) |
| **TEST METHOD** | | ISO 1183 | ISO 62 | | ISO 1133 | ISO 294 | ISO 294 | ISO 294-4 | ISO 527 | ISO 527 | ISO 527 | ISO 179/1eA | ISO 2039-1 | ISO 75-1/-2 | ISO 75-1/-2 | ISO 306 | ASTM D 1003 | ASTM D 1003 | ISO 489 |
| **UNIT** | | kg/m³ | % | | cm³/ 10 min | °C | °C | % | MPa | MPa | % | kJ/m² | MPa | °C | °C | °C | % | % | % |
| **CLEARLUX 816** | MABS | 1080 | 0.70 | M | 16.0 | 220-250 | 44-70 | 0.40-0.70 | 1900 | 42 | 20 | 8 | 75 | 87 | 93 | 87 | – | 2.00 | 1.54 |

**CLEARLUX®**

High flow, excellent chemical resistance, high impact, excellent transparency

## KEY PROPERTIES


## KEY APPLICATIONS

- Pens and pencils
- Housings
- Toys, sports and leisure applications
- Cosmetic packaging

CLEARLUX is the grade of choice due to its key properties, such as high flow and  and good colourability

# CLEARLUX®

## ADVANTAGES AT A GLANCE

Clearlux 816 is a methyl methacrylate acrylonitrile butadiene styrene (MABS) polymer. The grade offers a unique combination of excellent flow, high impact strength and good colourability.

**Good processability** *due to high flow*

**Impact resistance** *due to high impact strength*

*Allows for "smoked-glass" look due to* **excellent colourability**

**Food contact compliance** *with US FDA and EU standards*

## KEY PROPERTIES


## KEY APPLICATIONS

- **Pens and pencils**
- **Housings**
- **Toys, sports & leisure applications**
- **Cosmetic packaging**

CLEARLUX now available through your distribution partner

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