# LNP™ THERMOCOMP™ Compound 2X95787

## Americas: COMMERCIAL

**Also known as: LNP™ THERMOCOMP™ Compound PDX-FP-E-95787**
**Product reorder name: 2X95787**

LNP THERMOCOMP 2X95787 is a compound based on ETFE Copolymer resin containing Proprietary Filler(s).

| TYPICAL PROPERTIES[1] | TYPICAL VALUE | Unit | Standard |
|---|---|---|---|
| **MECHANICAL** | | | |
| Tensile Stress, yield | 490 | kgf/cm² | ASTM D 638 |
| Tensile Stress, break | 460 | kgf/cm² | ASTM D 638 |
| Tensile Strain, yield | 9.3 | % | ASTM D 638 |
| Tensile Strain, break | 13.7 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 435800 | kgf/cm² | ASTM D 638 |
| Flexural Modulus | 344400 | kgf/cm² | ASTM D 790 |
| Tensile Stress, yield | 47 | MPa | ISO 527 |
| Tensile Stress, break | 45 | MPa | ISO 527 |
| Tensile Strain, yield | 8.6 | % | ISO 527 |
| Tensile Strain, break | 12.8 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 4050 | MPa | ISO 527 |
| Flexural Stress | 66 | MPa | ISO 178 |
| Flexural Modulus | 4000 | MPa | ISO 178 |
| **IMPACT** | | | |
| Izod Impact, unnotched, 23°C | 136 | cm-kgf/cm | ASTM D 4812 |
| Izod Impact, notched, 23°C | 49 | cm-kgf/cm | ASTM D 256 |
| Instrumented Impact Energy @ peak, 23°C | 201 | cm-kgf | ASTM D 3763 |
| Izod Impact, unnotched 80*10*4 +23°C | 83 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 24 | kJ/m² | ISO 180/1A |
| **THERMAL** | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 222 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 3.2mm, unannealed | 107 | °C | ASTM D 648 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 203 | °C | ISO 75/Bf |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ( SELLER ) ARE SOLD SUBJECT TO SELLER S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller s materials, products, services or recommendations for the user s particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller s Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

© 2015 Saudi Basic Industries Corporation (SABIC).

# LNP™ THERMOCOMP™ Compound 2X95787

## Americas: COMMERCIAL

| TYPICAL PROPERTIES[1] | TYPICAL VALUE | Unit | Standard |
|---|---|---|---|
| **THERMAL** | | | |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 91 | °C | ISO 75/Af |
| **PHYSICAL** | | | |
| Density | 1.84 | g/cm³ | ASTM D 792 |
| Mold Shrinkage, flow, 24 hrs (5) | 1.8 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs (5) | 2.4 | % | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs (5) | 1.8 | % | ISO 294 |
| Mold Shrinkage, xflow, 24 hrs (5) | 2.4 | % | ISO 294 |
| Density | 1.83 | g/cm³ | ISO 1183 |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ( SELLER ) ARE SOLD SUBJECT TO SELLER S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller s materials, products, services or recommendations for the user s particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller s Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

©2015Saudi Basic Industries Corporation (SABIC).

# LNP™ THERMOCOMP™ Compound 2X95787

## Americas: COMMERCIAL

| PROCESSING PARAMETERS | TYPICAL VALUE | Unit |
|---|---|---|
| **Injection Molding** | | |
| Drying Temperature | 120 - 150 | °C |
| Drying Time | 4 | hrs |
| Melt Temperature | 315 | °C |
| Front - Zone 3 Temperature | 330 - 345 | °C |
| Middle - Zone 2 Temperature | 310 - 320 | °C |
| Rear - Zone 1 Temperature | 280 - 295 | °C |
| Mold Temperature | 95 - 120 | °C |
| Back Pressure | 0.2 - 0.3 | MPa |
| Screw Speed | 30 - 60 | rpm |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ( SELLER ) ARE SOLD SUBJECT TO SELLER S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller s materials, products, services or recommendations for the user s particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller s Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

©2015Saudi Basic Industries Corporation (SABIC).