

## LNP\* Thermocomp\* Compound TH0815A

### Americas: COMMERCIAL

Also known as: LNP\* Thermocomp\* Compound HSG-T-0815A

Product reorder name: TH0815A

LNP\* THERMOCOMP\* TH0815A is a compound based on Polyurethane resin containing High Specific Gravity Filler. Added features of this material include:  
High Specific Gravity.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yield	180	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, break	160	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yield	13.2	%	ASTM D 638
Tensile Strain, break	25.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	13600	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress	210	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus	15500	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield	19	MPa	ISO 527
Tensile Stress, break	17	MPa	ISO 527
Tensile Strain, yield	13.7	%	ISO 527
Tensile Strain, break	26.5	%	ISO 527
Tensile Modulus, 1 mm/min	1120	MPa	ISO 527
Flexural Stress	21	MPa	ISO 178
Flexural Modulus	1390	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	107	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	14	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	169	cm-kgf	ASTM D 3763
Multiaxial Impact	128	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	73	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	17	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	42	°C	ASTM D 648

(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±176;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.

Source GMD, last updated:

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

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com> AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use 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. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

\* LNP is a trademark of SABIC Innovative Plastics IP BV

\* Thermocomp is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved

## LNP\* Thermocomp\* Compound TH0815A

### Americas: COMMERCIAL

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>THERMAL</b>			
CTE, -40°C to 40°C, flow	8.64E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.77E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.25E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	44	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	8.15	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.48	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.49	%	ISO 294
Density	8.15	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62

(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±176.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.

Source GMD, last updated:

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

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com>. AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use 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 Seller. No statement Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

\* LNP is a trademark of SABIC Innovative Plastics IP BV

\* Thermocomp is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved

## LNP\* Thermocomp\* Compound TH0815A

### Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.03	%
Melt Temperature	200 - 210	°C
Front - Zone 3 Temperature	195 - 205	°C
Middle - Zone 2 Temperature	190 - 200	°C
Rear - Zone 1 Temperature	180 - 195	°C
Mold Temperature	15 - 45	°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±176.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.

Source GMD, last updated:

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

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com>. AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED. (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use 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 Seller. No statement Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

\* LNP is a trademark of SABIC Innovative Plastics IP BV

\* Thermocomp is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved