

# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

Polypropylene  
(PP)

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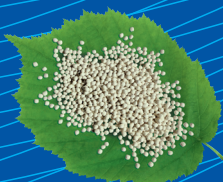
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THERMOPLASTIC ELASTOMERS

**elastron**  
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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of PP used in tests is 3,40 kJ/m<sup>2</sup> at room temperature (23°C).

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PP %	%0	%2	%4	%6	%8
D400.A53.N	3,40	3,80	4,00	4,20	4,55
T400.A70.N	3,40	3,70	4,00	4,15	4,45
D100.A40.N	3,40	3,65	3,80	4,15	4,35

Table 1 - Elastron Impact Modifier grades are used in PP as % 2, 4, 6, 8 respectively.

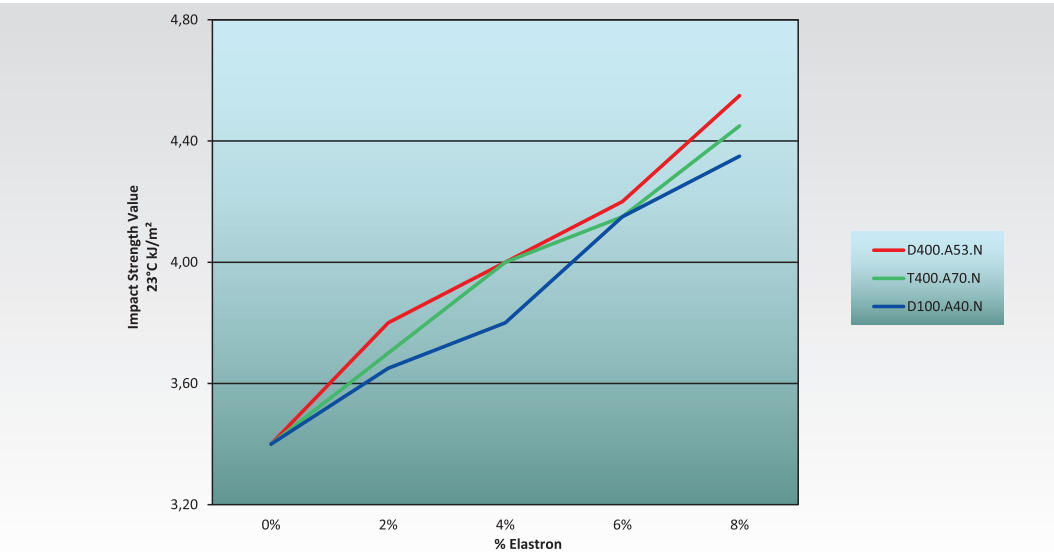


Figure 1 - Impact Strength values of PP after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of PP used in tests is 3,00 kJ/m<sup>2</sup> at -15°C.

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PP %	%0	%2	%4	%6	%8
D100.A40.N	3,00	3,50	3,60	4,20	4,50
T400.A70.N	3,00	3,45	3,65	4,00	4,10
D400.A53.N	3,00	3,40	3,70	3,80	4,00

Table 2 - Elastron Impact Modifier grades are used in PP as % 2 , 4 , 6 , 8 respectively.

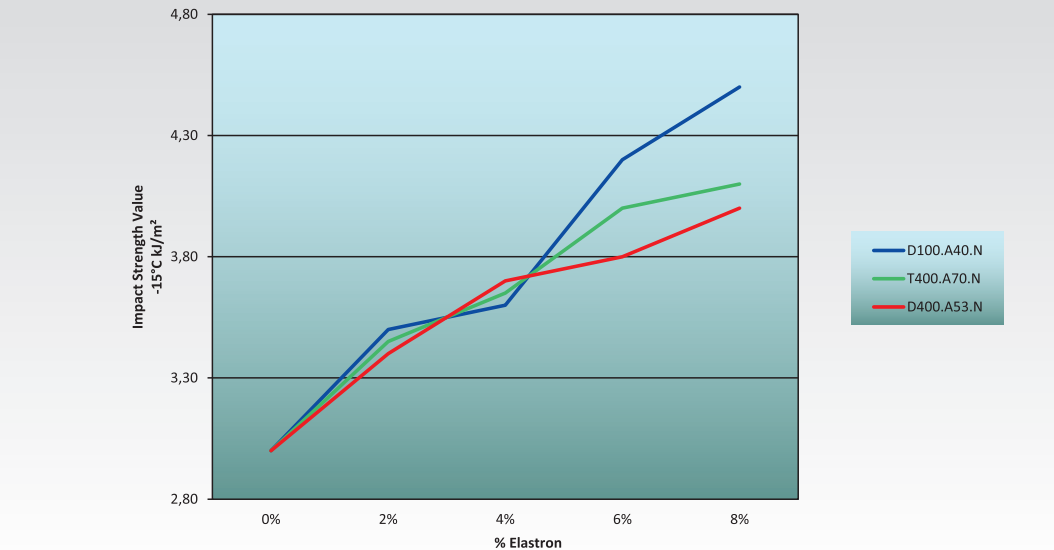


Figure 2 - Impact Strength values of PP after addition of Elastron Impact Modifier at -15°C

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Elastron  
TPE

Impact  
Modification

Recycled  
Polypropylene  
(Recycled PP)

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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of Recycled PP used in tests is 2,80 kJ/m<sup>2</sup> at room temperature (23°C).

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in Recycled PP %	%0	%2	%4	%6	%8
D400.A53.N	2,80	5,80	6,40	7,20	8,70
D100.A40.N	2,80	5,50	6,10	7,20	8,10
T400.A70.N	2,80	5,40	6,10	6,80	7,90

Table 1 - Elastron Impact Modifier grades are used in Recycled PP as % 2, 4, 6, 8 respectively.

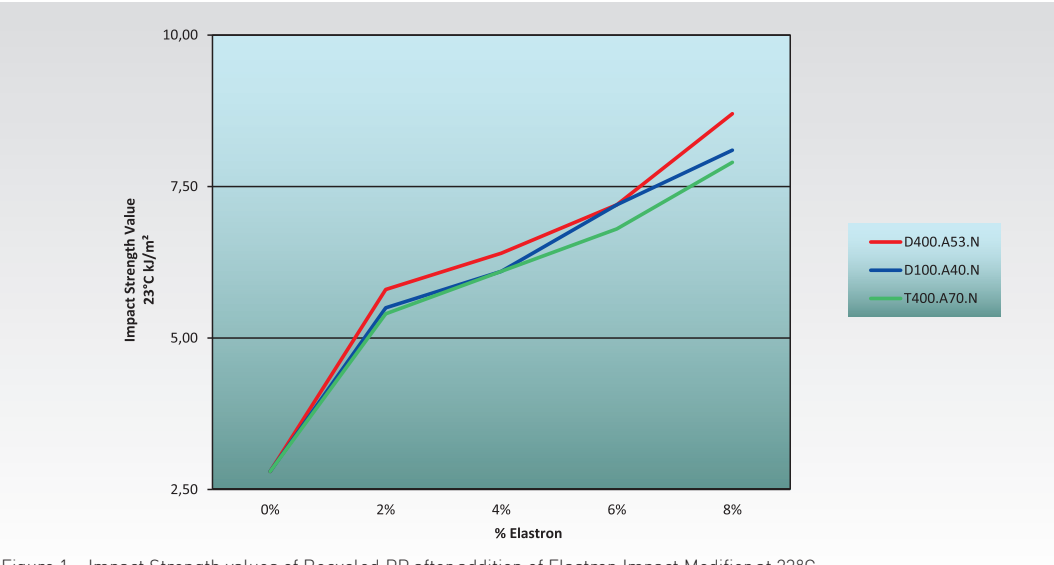


Figure 1 – Impact Strength values of Recycled PP after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of Recycled PP used in tests is 2,10 kJ/m<sup>2</sup> at -15°C.

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in Recycled PP %	%0	%2	%4	%6	%8
D400.A53.N	2,10	5,35	5,60	5,75	6,30
D100.A40.N	2,10	5,30	5,50	5,60	6,15
T400.A70.N	2,10	5,15	5,40	5,70	6,10

Table 2 - Elastron Impact Modifier grades are used in Recycled PP as % 2, 4, 6, 8 respectively.

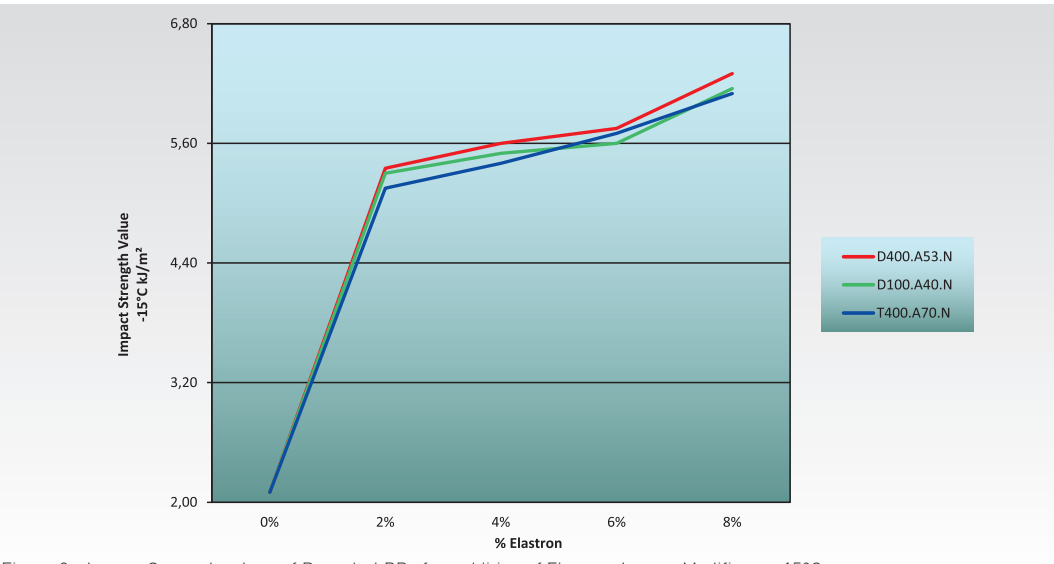


Figure 2 - Impact Strength values of Recycled PP after addition of Elastron Impact Modifier at -15°C



# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

High Impact  
Polystyrene  
(HIPS)

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THERMOPLASTIC ELASTOMERS

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**TYPICAL APPLICATIONS**

- Impact modification of polymers
- Modification of recycled polymer

**IMPACT TEST RESULTS AT ROOM TEMPERATURE**

Impact Strength of HIPS used in tests is 9,60 kJ/m<sup>2</sup> at room temperature (23°C).  
Impact PS used: Edistir 321 P from Enichem

**Impact Strength Value (kJ/m<sup>2</sup>)**

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in HIPS %	%0	%2	%4	%6	%8
D100.A20.N	9,60	11,70	14,10	15,40	16,00

Table 1 - Elastron Impact Modifier grades are used in HIPS as % 2, 4, 6, 8 respectively.

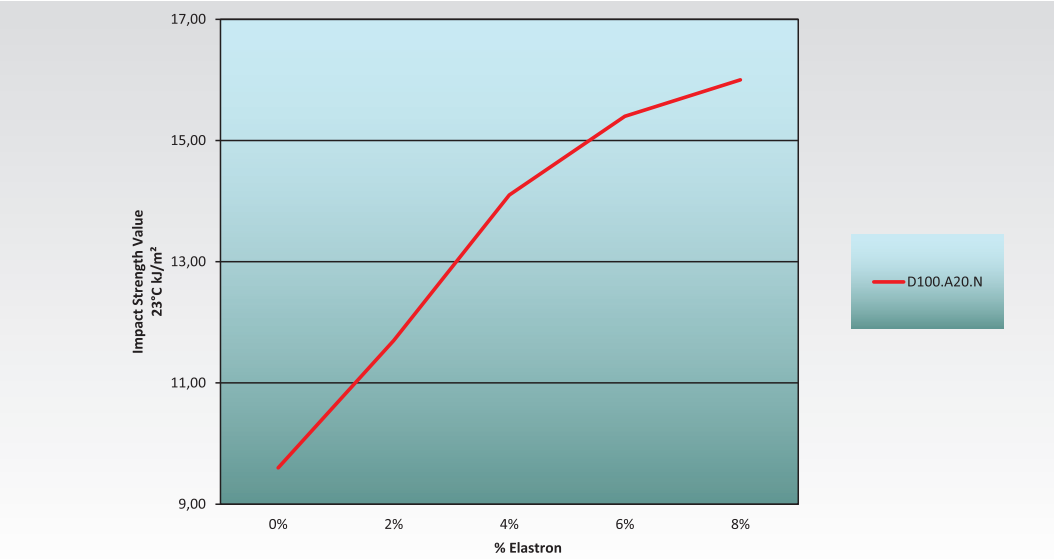


Figure 1 – Impact Strength values of HIPS after addition of Elastron Impact Modifier at 23°C

**TYPICAL APPLICATIONS**

- Impact modification of polymers
- Modification of recycled polymer

**IMPACT TEST RESULTS AT -15°C**

Impact Strength of HIPS used in tests is 5,60 kJ/m<sup>2</sup> at -15°C.  
Impact PS used: Edistir 321 P from Enichem

**Impact Strength Value (kJ/m<sup>2</sup>)**

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in HIPS %	%0	%2	%4	%6	%8
D100.A20.N	5,60	11,40	13,20	13,80	14,90

Table 2 - Elastron Impact Modifier grades are used in HIPS as % 2, 4, 6, 8 respectively.

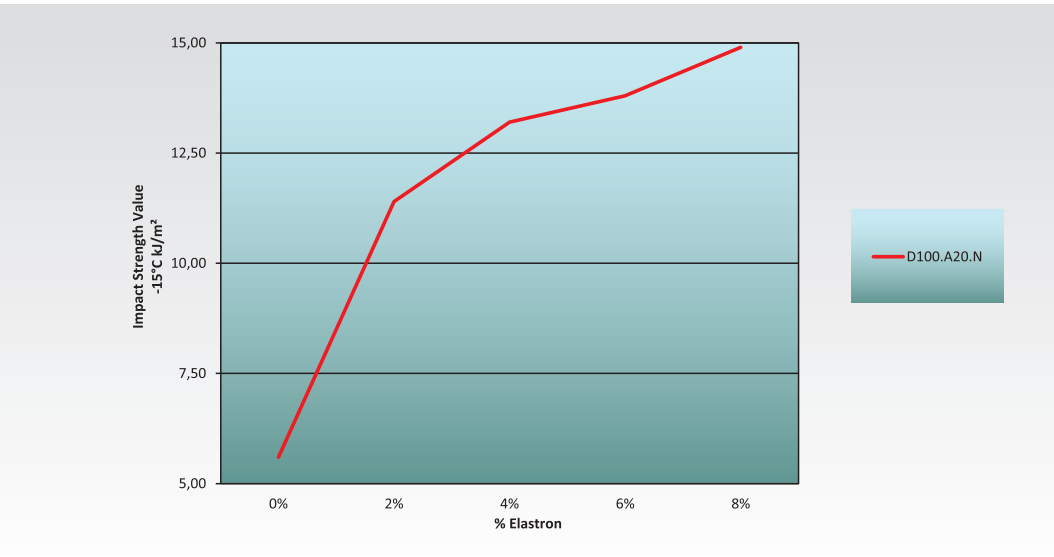


Figure 2 - Impact Strength values of HIPS after addition of Elastron Impact Modifier at -15°C

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Elastron  
TPE

Impact  
Modification

Recycled  
High Impact  
Polystyrene  
(Recycled HIPS)

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THERMOPLASTIC ELASTOMERS

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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of Recycled HIPS used in tests is 1,89 kJ/m<sup>2</sup> at room temperature (23°C).  
Recycled HIPS: Black Coloured Grade for Hanger Industry

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in Recycled HIPS %	%0	%2	%4	%6	%8
D400.A30.N	1,89	3,00	3,90	4,60	5,00
D100.A20.N	1,89	2,75	3,60	4,20	4,70

Table 1 - Elastron Impact Modifier grades are used in Recycled HIPS as % 2, 4, 6, 8 respectively.

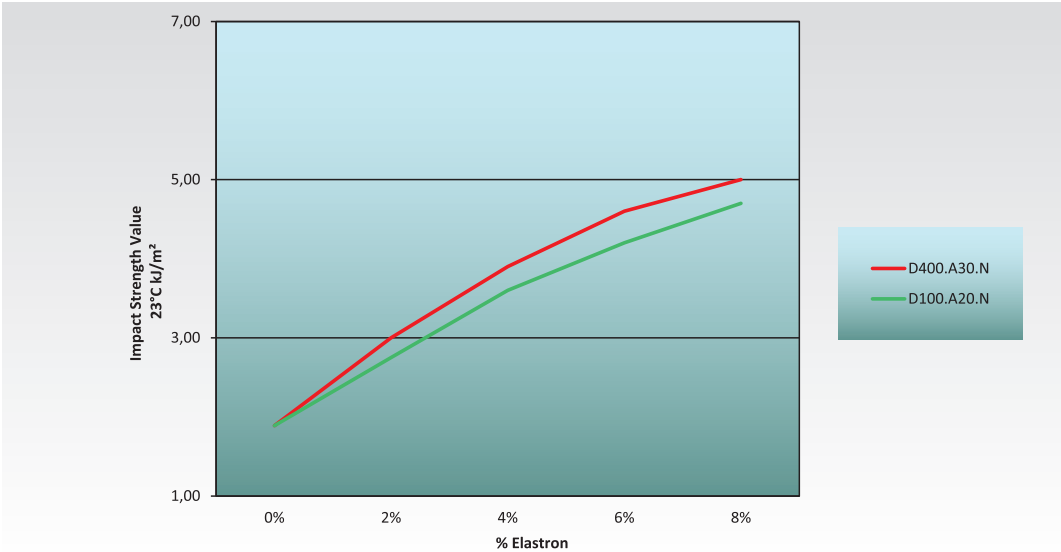


Figure 1 – Impact Strength values of Recycled HIPS after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of Recycled HIPS used in tests is 1,27 kJ/m<sup>2</sup> at -15°C.  
Recycled HIPS: Black Coloured Grade for Hanger Industry

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in Recycled HIPS %	%0	%2	%4	%6	%8
D400.A30.N	1,27	2,50	3,55	4,10	4,70
D100.A20.N	1,27	2,45	3,30	3,80	4,40

Table 2 - Elastron Impact Modifier grades are used in Recycled HIPS as % 2, 4, 6, 8 respectively.

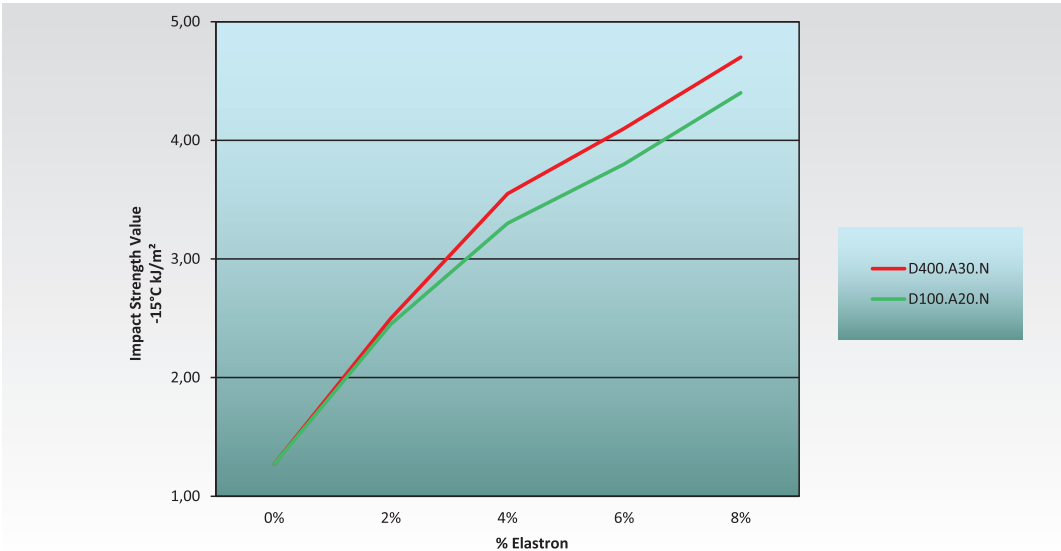


Figure 2 - Impact Strength values of Recycled HIPS after addition of Elastron Impact Modifier at -15°C



# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

High Density  
Polyethylene  
(HDPE)

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THERMOPLASTIC ELASTOMERS

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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of HDPE used in tests is 9,50 kJ/m<sup>2</sup> at room temperature (23°C).

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in HDPE %	%0	%2	%4	%6	%8
D400.A35.N	9,50	10,50	11,90	13,60	15,80
D400.A53.N	9,50	10,00	11,50	13,40	15,20

Table 1 - Elastron Impact Modifier grades are used in HDPE as % 2, 4, 6, 8 respectively.

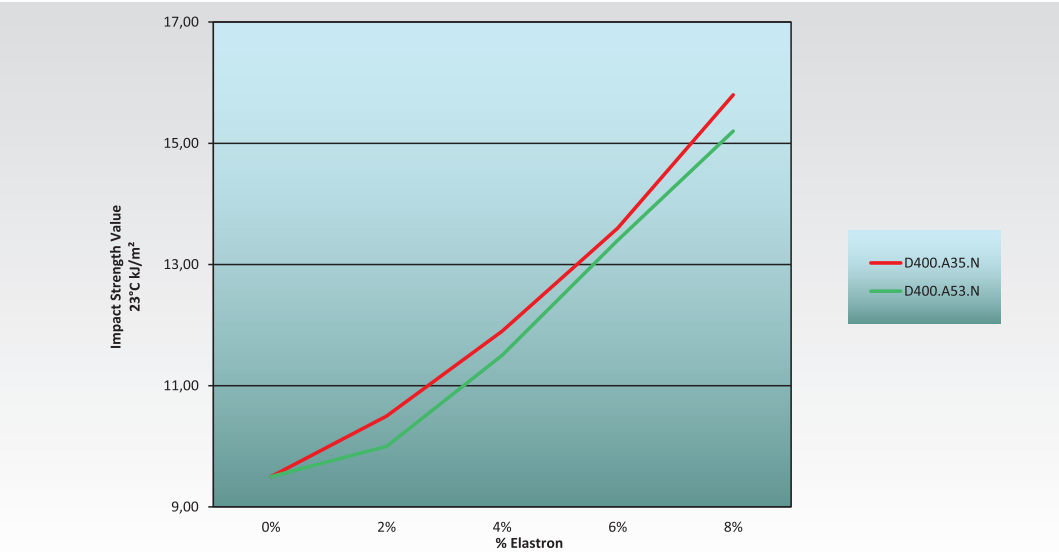


Figure 1 – Impact Strength values of HDPE after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of HDPE used in tests is 5,90 kJ/m<sup>2</sup> at -15°C.

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in HDPE %	%0	%2	%4	%6	%8
D400.A35.N	5,90	6,20	7,10	7,80	8,60
D400.A53.N	5,90	6,10	6,90	7,70	8,30

Table 2 - Elastron Impact Modifier grades are used in HDPE as % 2, 4, 6, 8 respectively.

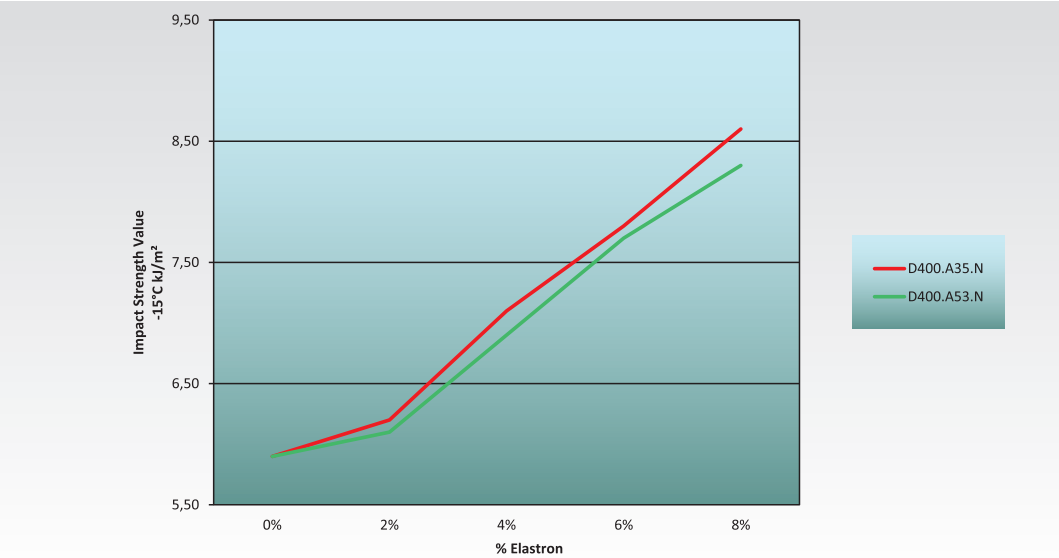


Figure 2 - Impact Strength values of HDPE after addition of Elastron Impact Modifier at -15°C

# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

Acrylonitrile  
Butadiene  
Styrene  
(ABS)

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THERMOPLASTIC ELASTOMERS

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**TYPICAL APPLICATIONS**

- Impact modification of polymers
- Modification of recycled polymer

**IMPACT TEST RESULTS AT ROOM TEMPERATURE**

Impact Strength of ABS used in tests is 16,60 kJ/m<sup>2</sup> at room temperature [23°C].

**Impact Strength Value (kJ/m<sup>2</sup>)**

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in ABS %	%0	%2	%4	%6	%8
D400.A30.N	16,60	17,60	24,10	24,80	25,90
G501.A40.N	16,60	20,60	21,70	23,90	24,30

Table 1 - Elastron Impact Modifier grades are used in ABS as % 2, 4, 6, 8 respectively.

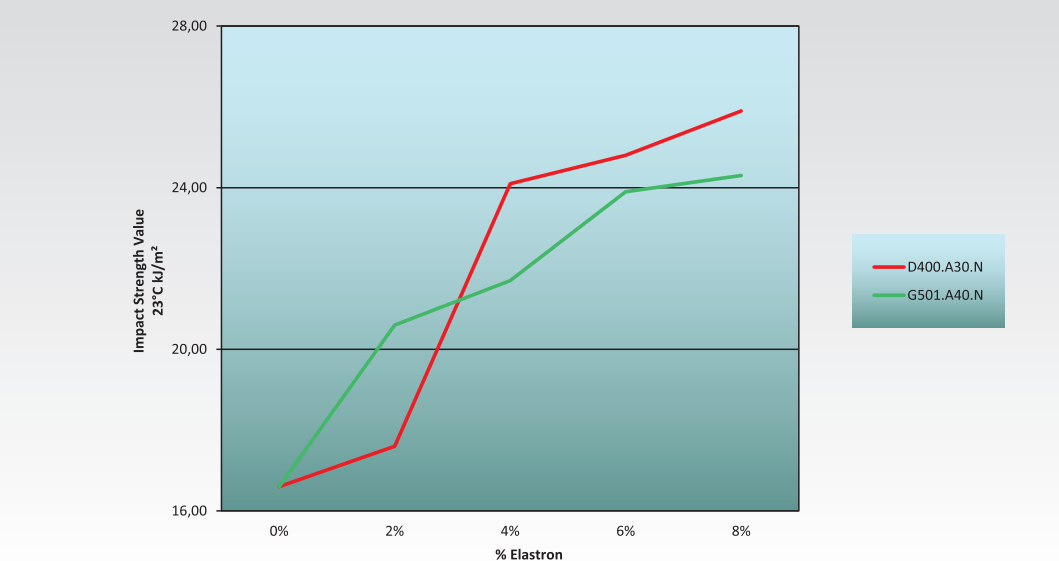


Figure 1 – Impact Strength values of ABS after addition of Elastron Impact Modifier at 23°C

**TYPICAL APPLICATIONS**

- Impact modification of polymers
- Modification of recycled polymer

**IMPACT TEST RESULTS AT -15°C**

Impact Strength of ABS used in tests is 12,20 kJ/m<sup>2</sup> at -15°C.

**Impact Strength Value (kJ/m<sup>2</sup>)**

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in ABS %	%0	%2	%4	%6	%8
D400.A30.N	12,20	17,50	20,90	22,10	24,20
G501.A40.N	12,20	17,10	18,80	19,70	22,50

Table 2 - Elastron Impact Modifier grades are used in ABS as % 2, 4, 6, 8 respectively.

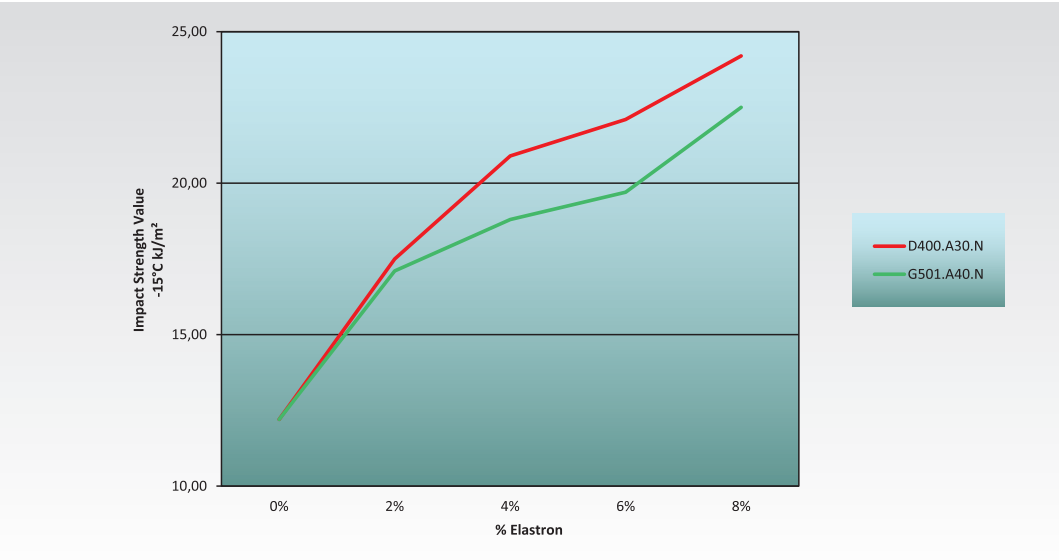


Figure 2 - Impact Strength values of ABS after addition of Elastron Impact Modifier at -15°C



# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

Polycarbonate  
(PC)

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THERMOPLASTIC ELASTOMERS

**elastron**  
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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of PC used in tests is 11,70 kJ/m<sup>2</sup> at room temperature [23°C].

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PC %	%0	%2	%4	%6	%8
G400.A12.N	11,70	13,00	47,00	48,00	49,00
G501.A40.N	11,70	13,00	45,50	47,00	48,00

Table 1 - Elastron Impact Modifier grades are used in PC as % 2, 4, 6, 8 respectively.

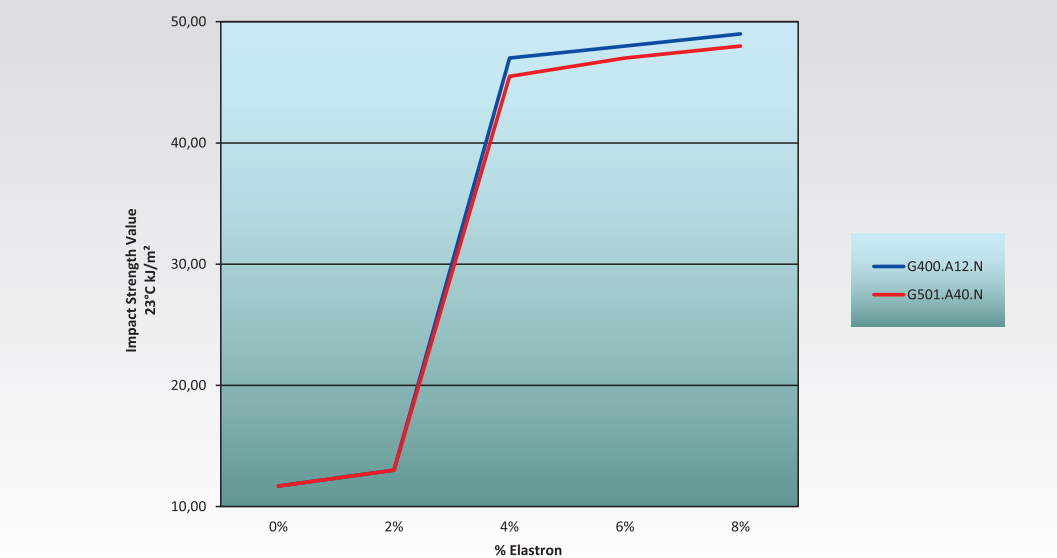


Figure 1 – Impact Strength values of PC after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of PC used in tests is 12,70 kJ/m<sup>2</sup> at -15°C.

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PC %	%0	%2	%4	%6	%8
G501.A40.N	12,70	13,90	16,10	32,00	42,70
G400.A12.N	12,70	15,40	16,00	31,50	37,30

Table 2 - Elastron Impact Modifier grades are used in PC as % 2, 4, 6, 8 respectively.

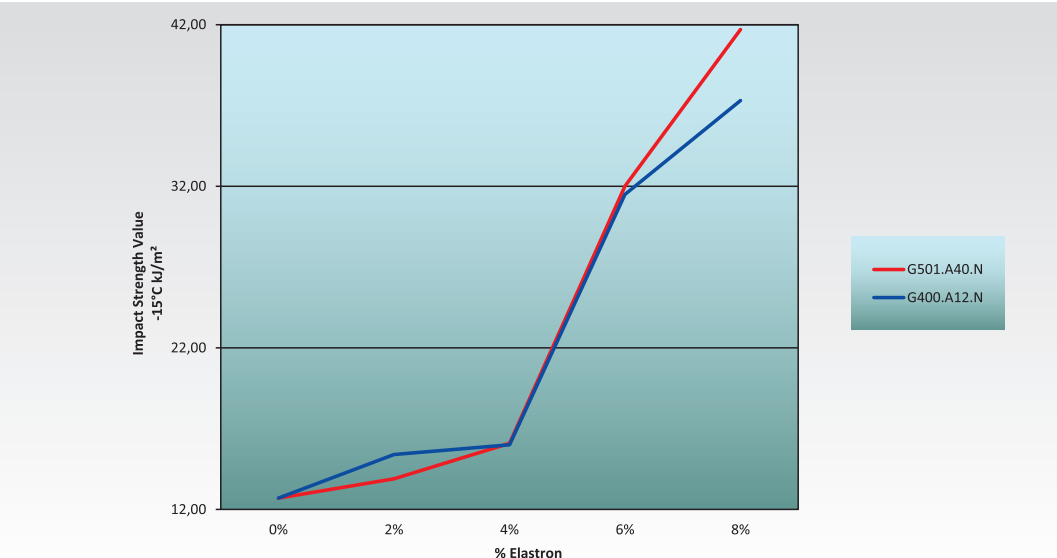


Figure 2 - Impact Strength values of PC after addition of Elastron Impact Modifier at -15°C

# ELASTRON THE TPE SPECIALIST

Elastron  
TPE

Impact  
Modification

Polyamide  
(PA)

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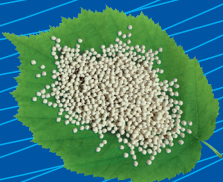
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THERMOPLASTIC ELASTOMERS

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TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT ROOM TEMPERATURE

Impact Strength of PA used in tests is 5,30 kJ/m<sup>2</sup> at room temperature (23°C).

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PA %	%0	%2	%4	%6	%8
G500.A23.N.PA	5,30	7,24	9,12	11,50	14,00

Table 1 - Elastron Impact Modifier grades are used in PA as % 2, 4, 6, 8 respectively.

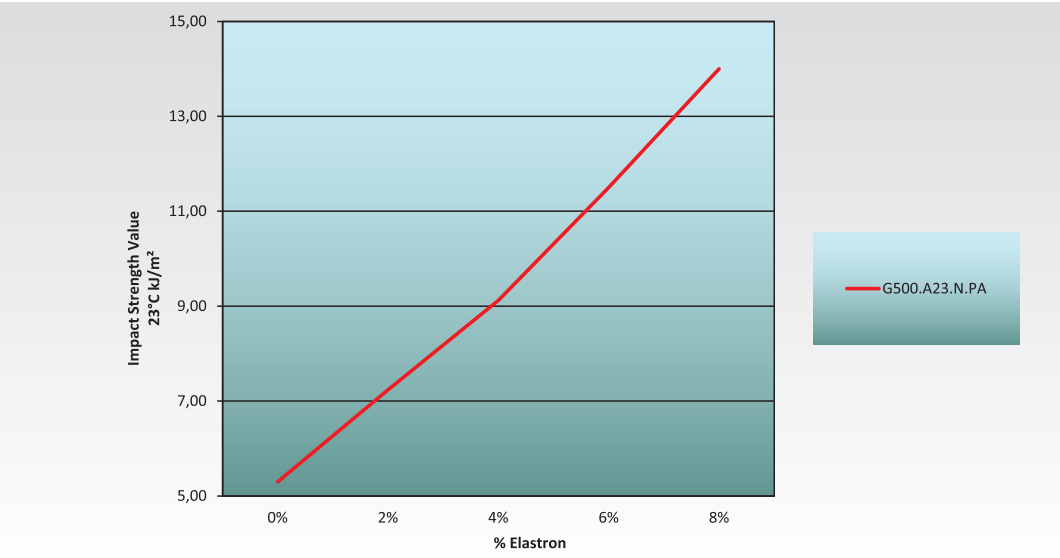


Figure 1 – Impact Strength values of PA after addition of Elastron Impact Modifier at 23°C

TYPICAL APPLICATIONS

- Impact modification of polymers
- Modification of recycled polymer

IMPACT TEST RESULTS AT -15°C

Impact Strength of PA used in tests is 4,10 kJ/m<sup>2</sup> at -15°C.

Impact Strength Value (kJ/m<sup>2</sup>)

Tests were carried out according to ASTM D256.

Using percentage of Elastron grades in PA %	%0	%2	%4	%6	%8
G500.A23.N.PA	4,10	6,30	7,90	9,20	10,50

Table 2 - Elastron Impact Modifier grades are used in PA as % 2, 4, 6, 8 respectively.

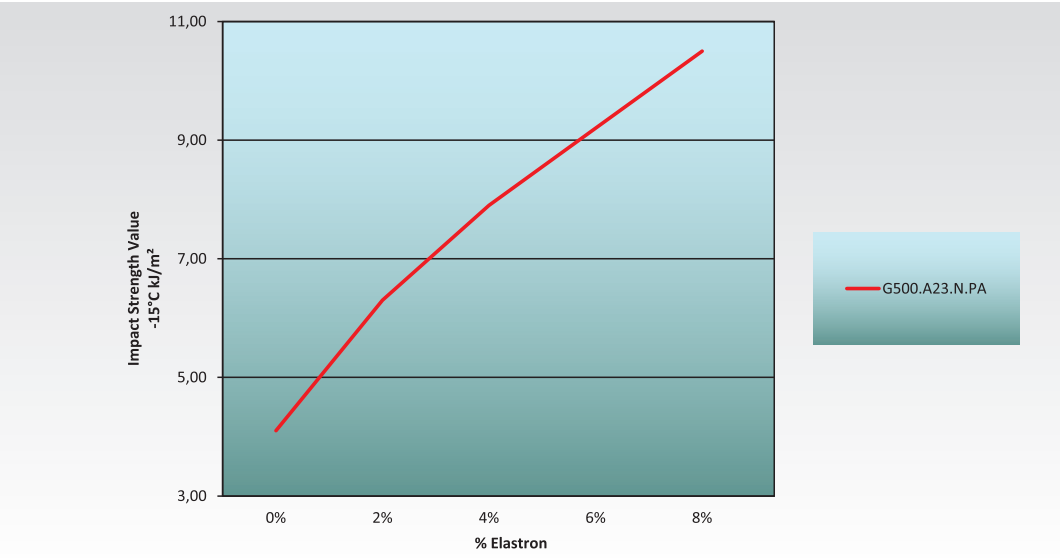


Figure 2 - Impact Strength values of PA after addition of Elastron Impact Modifier at -15°C