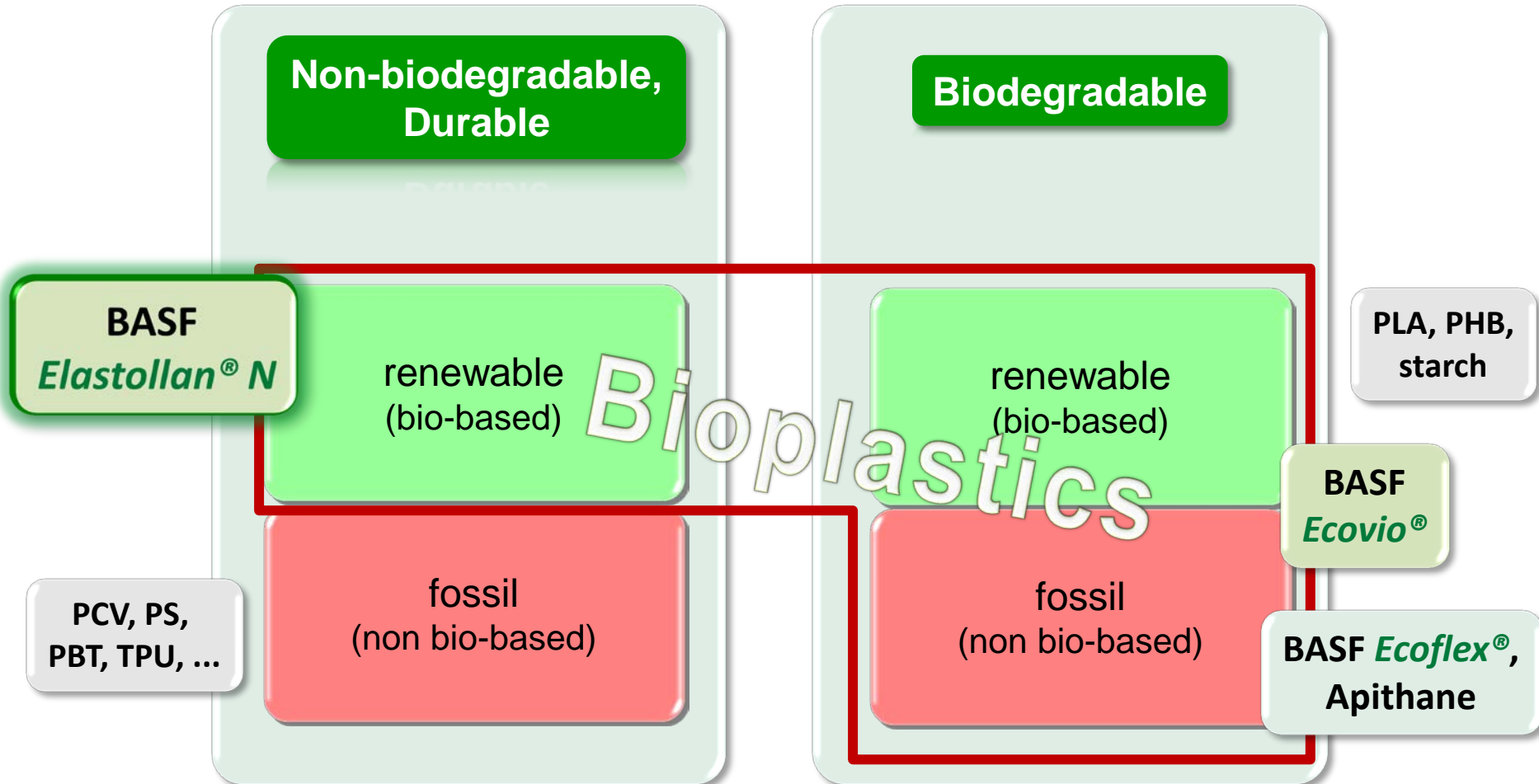






Elastollan[®] N - Biobased TPU



Functionality / USP	Applications (examples)	Added Value
Biodegradable	packaging, agro, catering 	Simple disposal, Lower system costs
Renewable, Non-biodegradable	automotive, appliance, construction, footwear 	„Environmental Footprint“/ life cycle assessment (LCA), Performance (?)

Elastollan® N – A biobased TPU

Biobased PESOL -> TPU



Raw Materials

- * Biobased raw materials
- * Di-Acid
- * Diol



Bio-PESOL

- * Up to 69 w/w% bio-Carbon
- * Low YI
- * Good producibility

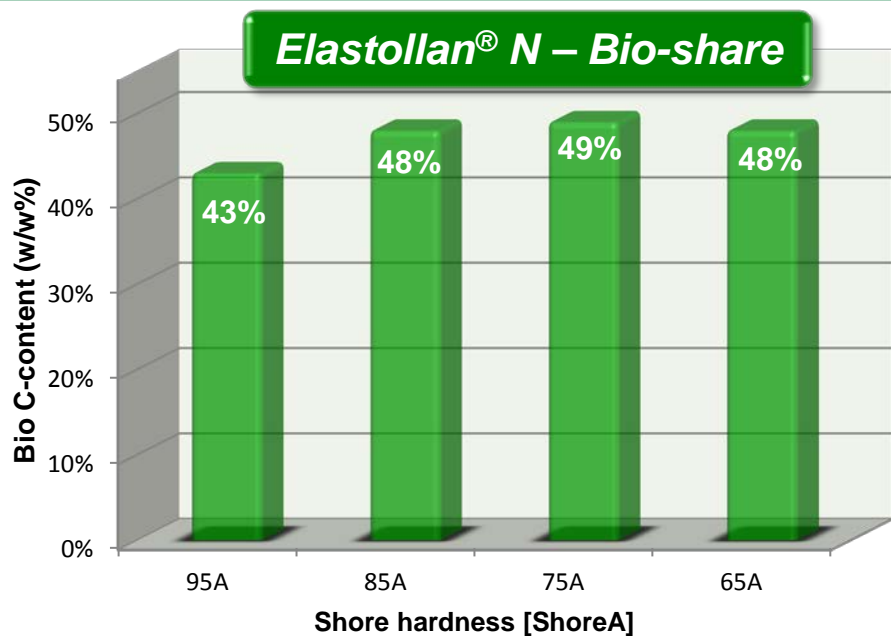


Elastollan® N - BioTPU

- * Up to 49 w/w% bio-Carbon (acc. to ASTM D6866)
- * Good mechanical properties
- * Low YI
- * Good low-temperature flexibility
- * Good hydrolytic stability

Elastollan® N – A biobased TPU

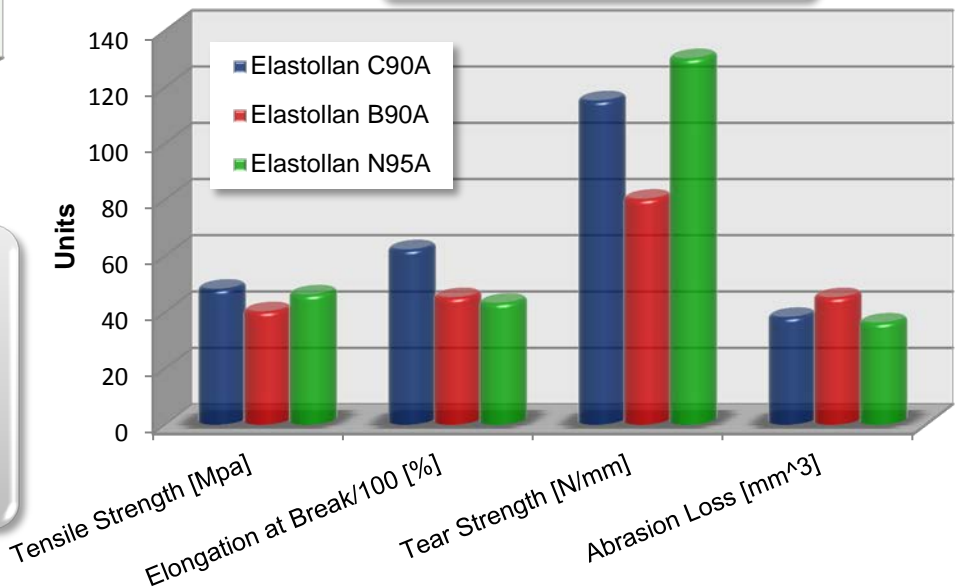
Performance



- Bio-share up to 49% biobased Carbon content
- Proofed by ASTMD6866 analysis

- Mechanical performance in the range of standard Elastollan® TPU grades
- Very good *Tear Strength* and *Abrasion loss*

Mechanical Data



Elastollan® N – A biobased TPU

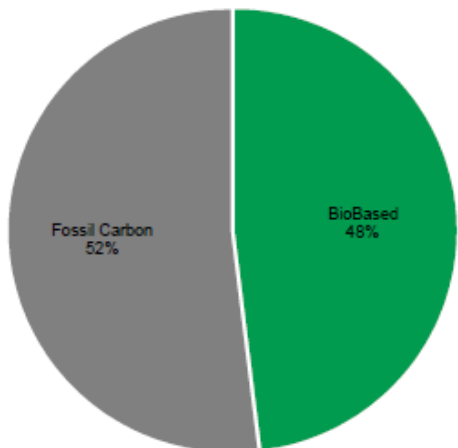
Bio Content – ASTM-D6866

Report of Biobased Content Analysis using ASTM-D6866-12

Submitter: BASF Polyurethanes GmbH
Submitter Label: ELASTOLLAN N 65A-12P
Laboratory Number: Beta-327526
Material: Biobased Solid
Date Received: August 06, 2012
Date Reported: August 10, 2012

Mean Biobased Result : 48 % *

Proportions Biobased vs. Fossil Based
indicated by 14C content

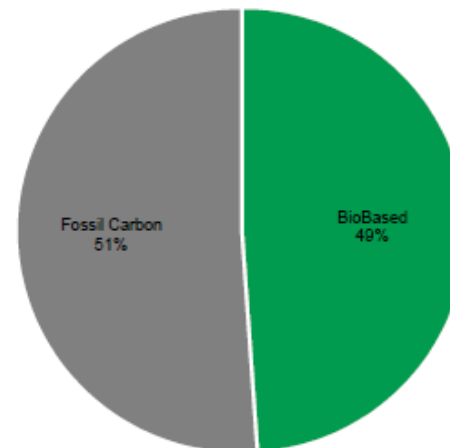


Report of Biobased Content Analysis using ASTM-D6866-12

Submitter: BASF Polyurethanes GmbH
Submitter Label: ELASTOLLAN N 75A-12P
Laboratory Number: Beta-327528
Material: Biobased Solid
Date Received: August 06, 2012
Date Reported: August 10, 2012

Mean Biobased Result : 49 % *

Proportions Biobased vs. Fossil Based
indicated by 14C content



Material Properties – Elastollan® N - Series

Elastollan®		C90A10	N65A12 P	N75A12 P	N85A12	N95A12
Bio - Content*	[w/w-%]	--	48	49	48	43
Hardness	[Shore]	90A	65A	75A	85A	95A
Tensile strength	[Mpa]	48	30	30	40	45
Elongation at break	[%]	620	600	510	420	430
Tear strength	[N/mm]	115	30	40	70	130
Abrasion loss	[mm^3]	38	35	25	35	35
Density	[g/cm^3]	1,200	1,15	1,17	1,19	1,21
YI	[]	5	10	13	17	18

* Bio content as w/w-% carbon, acc. to ASTM-D6866