

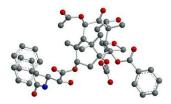
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Luran S ASA Data Sheet

Ecofoot2 utilizes Luran S ASA by Styrolutions, a joint venture of BASF and INEOS. Styrolutions combines the key styrenic assets of two of the largest chemical companies in the world, with world-class production facilities, complementary competencies, and more than 70 years of experience. Luran S ASA (Acrylonitrile Styrene Acrylate) is a durable, thermally stable, chemically resistant and colorfast thermoplastic suitable for demanding long-term outdoor use.

What is Luran ASA?

$$\begin{array}{c|c}
H & J & O \\
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H & OA
\end{array}$$



Material attributes":

- ♦ Excellent UV-resistance
 - Long-term retention of physical properties after weathering
- ♦ High thermal stability
 - Outstanding heat aging resistance
- ♦ Good impact resistance, rigidity, and strength
- Excellent and broad chemical resistance
 - Not electrically conductive, non-flammable
- ♦ High dimensional stability (amorphous material)
- ♦ Excellent processability
 - o 100% recyclable



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Material propertiesⁱⁱⁱ:

Specific Gravity	1.07	D-792
Water absorption saturated at 23° C, %	1.65	D-570
MECHANICAL Method	Property Value	ASTM Test
Rockwell Hardness, R Scale	107	D-785
Tensile Strength, Yield (2in/min), MPa (psi)		D-638
23°C (73°F)	44 (6,380)	
Flexural Modulus, MPa (psi)		D-790
23°C (73°F)	2,300 (333,000)	
IMPACT	Property Value	ASTM Test
Method		
Notched Izod Impact, J/M (ft-lbs/in)		D-256
-40°C (-40°F)	37 (0.7)	
23°C (73°F)	180 (3.4)	
Instrumented Dart Impact (Peak force), J (in-lbs)	51 (453)	D-3763
THERMAL Method	Property Value	ASTM Test

Common Applications:

- ♦ Marine
 - Motor covers
 - o Boat hulls
 - Sail boards
- **♦** Construction
 - o Exterior deck boards & trim
 - o Fencing
 - o Door panels



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- ♦ Misc
 - Satellite Dishes
 - Heat pump housing
 - o Outdoor signs
 - Luggage racks







ASA in continuous UV exposure applications

ASA has been in production since 1967 with 100's millions pounds shipped worldwide used in numerous commercial applications. The material has been chosen by all major OEM's due to:

- ♦ Superior weathering capability
- ♦ Impact resistance after long periods of cold and UV exposure
- Extremely consistent during the manufacturing process
- ♦ Absence of warranty issues

ⁱ ASA weatherability BASF

[&]quot;Luran S ASA in the solar industry BASF

iii Styrolution Luran S Data Sheet.pdf