

Press Information Fact Sheet

DSM Composite Resins AG
Stettenerstrasse 28
CH-8207, Schaffhausen
P.O. Box 1227
8207 Schaffhausen
Switzerland

Nuna7 and DSM: partners in world's largest solar vehicle event Durable energy and innovative technology



The solar powered car Nuna7

12th World Solar Challenge in
Australia

- Between 6 and 13 October 2013
- Depart from Darwin
- Finishing line in Adelaide, 3000 km to the south.
- Teams from all across the world
- On display: the latest in solar and composite innovation
- Nuon Solar Team on its way to cross finish line in pole position

Performance requirements

- Superior aerodynamics
- Low vehicle weight
- Operation at elevated temperatures
- Efficient solar and electrical systems
- Optimum driver safety protection

A new challenge this year

New race regulations requiring significant changes in car design and construction:

- Addition of a fourth wheel for improving stability
- Larger driver's canopy

Manufacturing process for
new Nuna7 car

- Vacuum bagging (structural parts and car framework)
- Rapid prototyping (several lighting and power components)

DSM Materials used

- Daron® Styrene-free resins (for the structural parts and frame) optimized for use with the newest Textreme® Carbon fiber
- Somos® TetraShell and Somos® WaterShed XC 1122 resin systems for stereolithographic processes

DSM support to the Nuon Solar Team

Sustainable resins, innovative composites application technology, hands-on support in manufacturing

- Close-to-zero smell and solvent emissions with Daron® Styrene-free resins systems
- Environmentally preferred alternative to conventional styrene-based resin systems
- Stiffer, stronger and lighter construction, resulting in a faster, safer and more energy efficient car
- Increase of 30 % in composite material rigidity compared to Nuna6, enabling a 3 times stiffer design to compensate for the additional torsion resulting from the extra fourth wheel.

Prototyping expertise, improving efficiency during the design and construction phases

- Quick production of many part options
- Durable, light-weight parts featuring great structural integrity with Somos® TetraShell through honeycomb-like lattice
- Efficient lighting components with high clarity Somos® WaterShed XC 11122 resin

The result

A superb Nuna7 vehicle that combines light weight, great aerodynamics, and dimensional stability at elevated temperatures

The winning team

- 16 ambitious and enthusiastic students from Delft University of Technology
- Fully committed to show the possibilities of durable energy and innovative technology - to inspire shaping a sustainable future

DSM - Bright Science. Brighter Living.™

Royal DSM is a global science-based company active in health, nutrition and materials. By connecting its unique competences in Life Sciences and Materials Sciences DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, pharmaceuticals, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM's 23,500 employees deliver annual net sales of around €9 billion. The company is listed on NYSE Euronext.

Media contacts:

DSM Composite Resins AG
Thomas Wegman
Marketing Manager
Tel: +31 6 8364 2884
Email: thomas.wegman@dsm.com

Somos® Materials by DSM
Heather Natal
Senior Communications Specialist
Tel: +1.847.214.3838
Email: heather.natal@dsm.com