

## High temperature Polyamide 6 (PA6) for under-bonnet automotive products

Matrix has created a unique high temperature resistant PA6 rotomoulding powder that can be moulded on conventional rotomoulding equipment. Features of this material are:-

- Suitable for applications needing to operate at up to 140 degrees C, meeting the normal requirements of under bonnet automotive applications.
- Excellent permeation resistance to oils, including gasoline, so suitable for hydraulic oil tanks and gasoline tanks.
- 4 times stiffer than 0,935 LLDPE
- Very good impact strength, even at low temperatures

A luxury European car manufacturer was looking to have an air duct produced by Rotomoulding for their new and very powerful iconic sports car. The ducting is needed to collect cold air and deliver this to the ceramic braking discs, so they do not overheat during extreme braking. The production volumes are small, but the requirements for aesthetic look, tolerances and performance are very high.



The mouldings have to withstand high temperatures, especially near the ceramic brakes, and they have to be tough, stiff and be light-weight and be made to very tight and exacting tolerances. Additionally the inner surface of the mouldings are fully visible at the front of the sports car, so they need to be as black and glossy as possible.

Matrix Polymers is uniquely specialised in developing and producing materials just for the Rotomoulding process and supplies and supports Rotomoulders globally. The company believes that our industry will continue to expand and new applications will be able to be developed by introducing fresh, innovative and exciting new materials.

For any information about Matrix Polymers and any other product please email [sales@matrixpolymers.com](mailto:sales@matrixpolymers.com) or visit our website [www.matrixpolymers.com](http://www.matrixpolymers.com)