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PRESS RELEASE

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For immediate release

RadiciGroup at Fakuma

Come and see us:
HALL A1 - STAND A1-1106

During Fakuma 2011 RadiciGroup will present its traditional range of products and focus on its most recent developments:

- **Radilon® A HHR (*High Heat Resistant*)**: PA66 engineering plastics for high temperature applications.
- **Radilon® D**: eco-sustainable PA610 engineering plastics for moulding and extrusion.
- **Radilon® A RV500RW 339 and Radilon® S URV**: PA66 and PA6 engineering plastics with high fill levels, suitable as replacements for metals and thermohardening materials.

At Fakuma 2011, the international trade fair for plastics processing to be held in Friedrichshafen, Germany, from 18 to 22 October, RadiciGroup Plastics is showcasing some of its most recent developments in the field of sustainable innovation, including:

Radilon® A HHR (*High Heat Resistant*) …

A **polyamide 66** with **exceptional heat resistance to aging** in air at temperatures of up to 210°C. The characteristics of this product, which are clearly superior compared to traditional polyamides, make it **ideal for the automotive sector**. By way of example, a standard heat-stabilized PA66 is completely carbonized after 2000 hours of exposure to temperatures of 210°C. Consequently, its tensile strength and impact strength practically vanish. In contrast, in the case of Radilon® HHR, the residual values of these two properties are very high.

Laboratory tests have shown the clearly superior performance of Radilon® HHR over the benchmark materials. For instance, Radilon® HHR retained more than 50% of its initial tensile strength, whereas the tensile strength of the benchmark material fell to 27% of its initial value.

A significant improvement was noticed even in comparison to special polymers such as polyphthalamides (PPAs). After 2000 hours of aging in air at 200°C, the tensile strength of Radilon® HHR had a residual value of 66%, while the PPA's residual value fell to 48%.

What are the main applications of Radilon® A HHR? In the automotive sector…

- Intercooler trays
- Turbo ducts and manifolds
- Resonators

… and all those applications for which specifications require continuous use at temperatures of up to 210°C.

Besides polyamides for moulding, RadiciGroup Plastics has also developed two high-viscosity materials for 3D blow-moulding. Thus, RadiciGroup now is capable of offering its customers engineering plastics for applications for continuous use in air at high temperatures with no restrictions on the choice of processing technology or on how complex the geometry of the moulded part can be.

Radilon® D…

Radilon® D is a new family of **PA610 engineering plastics**, 60% made of biological polymer and designed for injection and extrusion moulding. **Radilon® D** was developed within the framework of a sustainable innovation project that RadiciGroup Plastics has been pursuing for quite some time. PA610 polyamides reduce environmental impact, while featuring properties that are the equivalent of, if not superior to, those of traditional polyamides.

Compared to PA6 and PA66, Radilon® D polyamides show:

- Reduced moisture uptake.
- Less loss of tensile strength and tensile modulus under wet conditions.
- Better chemical resistance against zinc chloride and calcium chloride.
- Improved glycol resistance.

Compared to PA11 and PA12, Radilon® D materials show:

- Higher heat resistance.
- Reduced hydrocarbon permeability.

What are the main applications of Radilon® D? In the automotive sector...

- Fuel lines - Fuel line connectors - Pneumatic conduit - Brake conduit - Under-the-bonnet components.

Radilon® A RV500RW 339…

Metal replacement is a field that has become extremely important for many target markets of RadiciGroup Plastics, from automotive to machinery and household appliances. For this reason, our Group has focused on expanding its PA6 and PA66 engineering plastics ranges to include materials that can be used as replacements for metals and thermohardening materials. Among the most recent products is:

- **Radilon® A RV500RW 339**, 50% glass-fibre filled PA66 engineering plastics developed to meet the demand for materials with improved mechanical properties, particularly when weld lines are present.

Compared to traditional PA66 polyamides, Radilon® A RV500RW 339 ensures:

- Improved mechanical resistance and strain at break.
- Improved mechanical resistance and strain at break when weld lines are present.
- Improved impact resistance in both wet and dry conditions.

What are the main applications of Radilon® A RV500RW 339? In the automotive and industrial sectors…

- Engine mounts.
- Gearbox housings.
- Car seat frames.
- Reaction brackets.

As for PA6 engineering plastics (**Radilon® S URV**), RadiciGroup Plastics makes high fluidity 50%- and 60%-filled versions. These products are already being used to make structural components that were once made of metal.

Developing improved performance solutions at an affordable cost: this is the challenge RadiciGroup Plastics has taken on and plans to win!

For more information on our products:
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A FORUM DEDICATED TO RADICIGROUP PLASTICS' LATEST DEVELOPMENTS…

In the course of Fakuma 2011, RadiciGroup Plastics will hold a forum on the topic: *"RadiciGroup: high temperature polyamides, metal replacements and new range of PA 6.10s"*. The presentation will be held on **20 October starting at 4.15 p.m. at the Fakuma Conference Center (Hall 5-6)** and will be open to the press and fair visitors. During the talk, RadiciGroup will present its most recent developments.

For more information: info.plastics@radicigroup.com

RADICIGROUP PLASTICS_RadiciGroup, one of the most highly regarded manufacturers of **polyamide and polyester engineering plastics**, has production and sales units across the globe in Europe, Asia, North America and South America. With six plants strategically located in Italy, Germany, the United States, Brazil and China, RadiciGroup Plastics offers processing, quality control, research and development, and technological development support. A network of sales units makes RadiciGroup a truly global organization, capable of meeting the needs of its plastics customers worldwide on a timely basis. RadiciGroup offers a complete range of engineering plastics: PA6 and PA66 engineering polymers and copolymers (Radilon® - Radiflam® - Heramid® green products), PA610 (Radilon® D), PET and PBT (Raditer®), POM (Heraform®), TPEs (Heraflex®) and PP (Radilene®). RadiciGroup Plastics products are used in the automotive, electrical/electronics, sports and industrial sectors_ **www.radicigroup.com/plastics**

RADICIGROUP_With 2010 consolidated sales of EUR 1.162 billion, RadiciGroup is one of Italy's leading chemicals multinationals, a diversified group specializing in chemicals, plastics and synthetic fibres. Among the Group's key strengths is the synergistic vertical integration of its polyamide production chain. RadiciGroup products are exported all over the world and are widely used in applications such as apparel, sports, furnishings, automotive, electrical/electronics, household appliances and consumer goods._ **www.radicigroup.com**. RadiciGroup, with its Chemicals, Plastics and Synthetic Fibres Business Areas controlled by parent company Radici Partecipazioni SpA, is part of a larger industrial group that also includes textile machinery and energy businesses._ **www.radici.com**

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