

Newsletter

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**A new name,
a new design,
a new beginning**



A Note from the Managing Director

Welcome to our newly designed newsletter and to LyondellBasell Australia. This new design is a reflection of our new name and a new beginning.

The change in name and branding reflects what will be, over the coming months, a change in our product offerings. As LyondellBasell, we will be better positioned to provide you with the polymer products and support you need to succeed.

At LyondellBasell, it is our responsibility to make available to you the best products and services the polyolefins industry has to offer. Against a background of turbulent financial markets and Australian industrial uncertainty, we truly aim to be a bedrock supplier to the Australia and New Zealand market.

As year-end fast approaches, I will take this final opportunity to thank you once again for the privilege of doing business with you. Please accept my personal best wishes and season's greetings to you and your loved ones.

Finally, I would like to congratulate many of you once again on the success your businesses have enjoyed this year; trusting also that in the uncertain times ahead, opportunities await you, and that 2009 will be a profitable and safe year for your business.

Barry Kelly
Managing Director, LyondellBasell Australia

A new name ... LyondellBasell Australia

On October 7, 2008 Basell Australia officially changed its name to LyondellBasell Australia Pty Ltd.

Our new name reflects our new company. You may recall that in our previous newsletter, it was announced that we have become LyondellBasell Industries, formed from the merger of Basell and Lyondell Chemical Company.

Our logo, however, is not new to you, as we have been using the LyondellBasell logo for many months.

Now that we have officially changed our name, we are progressively re-branding our stock. Any new production of polypropylene in 25kg bags is being packaged using the new LyondellBasell visual identity.

This is an exciting time for us and we look forward to serving you as the new LyondellBasell Australia.



Product News – *Moplen* RP349R

LyondellBasell manufactures a comprehensive range of polypropylene resins used in the housewares market. In addition to this family of resins, LyondellBasell Australia has recently introduced *Moplen* RP349R - a random copolymer that provides improved stiffness in transparent houseware products.

To meet the requirements of retailers and consumers, LyondellBasell Australia has developed *Moplen* RP349R, a new resin that is stiffer than standard random copolymers. As a result of this improved stiffness, housewares produced using *Moplen* RP349R have exhibited increased dimensional rigidity and creep resistance. This property enhancement allows for improved stackability of containers. Manufacturers of houseware articles can also find additional benefits, such as reduced cycle times with improved part release from moulds. With *Moplen* RP349R's improved stiffness performance, downgauging of houseware articles is possible.

Moplen RP349R has been formulated to maximise transparency, stiffness and design opportunities for manufacturers of houseware items. *Moplen* RP349R exhibits very good clarity, high gloss and low-stress whitening properties, and can be used in food contact applications.

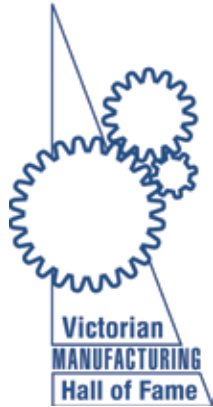
For more information about *Moplen* RP349R or other resins used in housewares, please contact your LyondellBasell representative, or call +61 3 9829 9455.



Victorian Manufacturing Hall of Fame

On May 19, 2008, LyondellBasell Australia was inducted into the Victorian Manufacturing Hall of Fame.

After being nominated by the Geelong Manufacturing Council, LyondellBasell Australia was accepted into the Hall of Fame in recognition of its pursuit of manufacturing excellence and commitment to continual improvement over a number of years. The award highlighted LyondellBasell's Geelong plant expansion and investment programme over the last six years; its commitment to the community, improved HSE performance and its culture of innovation.



2008 PACIA Health & Safety Award

LyondellBasell Australia Pty Ltd was awarded the 2008 Plastics and Chemicals Industries Association (PACIA) Health & Safety Award for the successful and safe implementation of its Geelong polypropylene plant shutdown in 2007. The award was presented at the PACIA National Conference in Melbourne, Australia on June 18, 2008.

The PACIA Health and Safety Award recognises individuals or groups who have undertaken innovative projects or activities that have resulted in making the plastics, chemicals and associated industries safer and healthier places to work.



Geelong staff with the winning cheque



Hostalen ACP and Lupotech process plants in Saudi Arabia

New PE production in Saudi Arabia

Saudi Ethylene and Polyethylene Co. (SEPC), a joint venture between LyondellBasell and two local partners, Tasnee Petrochemicals and the Sahara Petrochemicals Company, has started up a 400 KT per year *Hostalen* ACP plant. The joint venture will also produce LDPE at its 400 KT per year *Luptotech* T plant, scheduled to start up early next year. The two plants, located in Al-Jubail Industrial City in Saudi Arabia, will be highly competitive sources of HDPE and LDPE resins for the Asian and European markets.

"These plants represent the state-of-the-art in current polyethylene process technologies," said Manuel Fraga, LyondellBasell Vice President of Africa and Middle East Operations. "The scale of production and the ready availability of local feedstocks will place them among the most competitive PE production assets in the world."

The two plants will use LyondellBasell's leading *Hostalen* ACP and *Luptotech* T technologies for the production of HDPE and LDPE (see boxes).

"The flexibility of these PE process technologies will allow the plants to produce a wide range of value-added PE resins to satisfy demand in Asian markets as well as Europe," said Fraga.

Hostalen ACP – high performance from pipes to packaging

With over six million tonnes per year of installed capacity, the *Hostalen* process is a leading bimodal slurry HDPE technology. The development of the Advanced Cascade Process (ACP) has further extended its range and efficiency.

Multimodal resins produced using the *Hostalen* ACP process offer a combination of mechanical product properties and processing behaviour not achievable with conventional HDPE. The technology enables producers to address market requirements ranging from thin-wall packaging to needs for higher crack resistance in pipe applications.

The first world-scale *Hostalen* ACP plant began operations in Germany in 2004, followed by another in Poland in 2005.

Lupotech T – a broad grade slate on a single reactor

The *Lupotech* T process is the most popular tubular reactor technology for LDPE production.

Since 2000, more than 15 production lines have been licensed globally, with a total licensed capacity of more than seven million tonnes annually.

The *Lupotech* T process produces materials that can be sold at a premium over standard PE resins and the process covers the entire range of melt flow rates and densities, including vinylacetate copolymers (EVA).

The process is extremely versatile and fast grade changes ensure that the amount of off-grade material is kept very low, allowing a broad product slate to run on a single reactor.



Polyolefin Boffin Q & A

Welcome to the new technical question and answer section of the LyondellBasell Australia Newsletter. LyondellBasell Australia prides itself on being able to provide technical solutions for its own developments and the developments of its valued customers. LyondellBasell Australia also offers its customers technical service via its technical sales managers, laboratory services and product management group. In each issue of this newsletter, the Polyolefin Boffin will answer technical questions related to polyolefins from customers. You are invited to submit technical questions to the Polyolefin Boffin courtesy of the editor's e-mail teresa.bulzomi@lyondellbasell.com.

Q What is the difference between density and bulk density, and are they important?

A This is a question I am asked a lot and it is important to know the difference. Density measurements date back to ancient Greece, when the mathematician Archimedes determined the volume of the King's crown and related this to its mass to check whether the King's goldsmith had substituted gold with other metals.

Density is defined as the mass of an object per volume of that object. The density of plastics is defined as the weight per volume of an impermeable material measured at 23°C according to ASTM D972. If we consider a solid square cubic centimetre of polypropylene, it would have a mass of approximately 0.90 grams. Polypropylene has a density of approximately 0.90 g/cm³ (or kg/m³). Water has a density of approximately 1.0 g/cm³. As a result of this, polypropylene is buoyant in water due to its lower density. Conversely other plastics such as polystyrene have a greater weight per volume than water and, as such, sink instead of float.

The density of a particular plastic can be influenced by numerous factors including the temperature of the plastic, type and level of crystallinity, whether a mineral filler is used in the formulation and whether the plastic is foamed or not.

Density is an important physical property that needs to be considered when selecting a plastic for an intended application. The low density of polyolefins is a positive attribute in selecting these materials for your applications.

Bulk Density is defined as the total mass of many particles of the material per total volume the particles occupy. The total volume includes the volume occupied by the particles and the spaces between the particles. Bulk density is used when dealing with the handling of powders and granules. The bulk density of powders and granules is dependent upon the density of the material and the size and shape of the particles.

Bulk Density is generally measured according to ASTM D1895B and involves filling a known volume using a graduated cylinder and measuring the mass of that particular volume using an analytical balance. LyondellBasell Australia polypropylene granules have a bulk density of approximately 0.6 g/cm³.



More Product News – *Adstif* HA848K

LyondellBasell Australia recently launched the first locally produced polypropylene in its *Adstif* trade name range. *Adstif* HA848K is a homopolymer polypropylene with exceptional stiffness and high clarity. *Adstif* HA848K is a product that is manufactured locally using LyondellBasell's state-of-the-art next generation polypropylene catalyst technology. Globally, LyondellBasell produces a range of *Adstif* resins, both homopolymers and impact copolymers (heterophasic copolymers) used in applications such as:

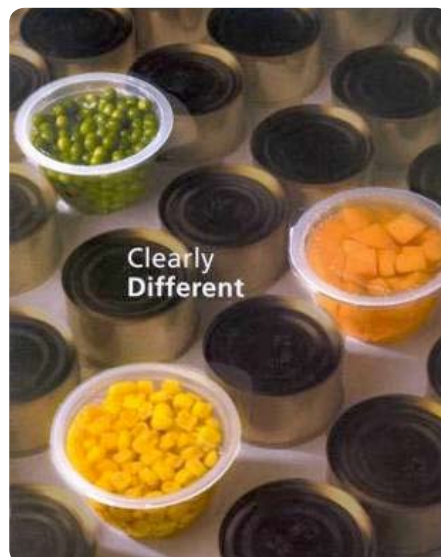
- sheet and solid phase thermoformed containers
- cast and biaxially orientated polypropylene film for stiffer packaging
- injection moulded applications for the housewares market

Adstif HA848K is specifically designed for use in extruded sheet and solid phase thermoforming. With high crystalline properties, *Adstif* HA848K can be used to produce finished articles such as transparent food containers that have high stiffness, high gloss and good dimensional stability at elevated temperatures.



Adstif HA848K is an effective alternative to many glass, steel and tin food packaging articles, and can help packaging producers overcome many of the limitations these materials have. *Adstif* HA848K exhibits good clarity, but also has the added benefit of being both dimensionally stable and substantially less breakable than glass, and less deformable than steel or tin packaging. When compared to glass, steel and tin packaging, articles manufactured from *Adstif* HA848K are lighter in weight and can be manufactured in a wider range of design possibilities. With food contact compliance to (FDA) US Code of Federal Regulations 21 CFR177.1520 (a)(1) and (c)1.1, *Adstif* HA848K can be used in food packaging, including applications that are required to be filled while hot.

For more information on *Adstif* HA848K please contact your LyondellBasell representative or alternatively call +61 3 9829 9455





Design for Sustainability

“Design for Sustainability with Plastics” is a series of “Quickstart” publications providing D4S (design for sustainability) strategies and technical information on plastics. The Quickstarts are written to assist practitioners at every stage of a plastic product’s life, including designers, raw material suppliers, manufacturers, brand owners, specifiers, end users and recyclers.

Design for Sustainability with Plastics is a joint project between Sustainability Victoria and the Plastics and Chemicals Industries Association (PACIA). LyondellBasell Australia welcomes the opportunity to contribute to this programme, offering input and insight along with other resin suppliers and interested parties.

The complete Quickstart series will include 12 publications on D4S strategies, new technologies, life cycle tools, and technical information on plastics. Quickstart 1 is available now and details D4S principles and strategies. Quickstart’s 2-12 presents detailed information across key areas of D4S with plastics and are being developed progressively through to 2009.

To receive the Quickstart documents and updates as they are released, you will need to register your contact details with Krista Imberger of PACIA by emailing to kimberger@pacia.org.au.



We have moved ...

The Melbourne office of LyondellBasell Australia has re-located. Our new address now is:-

Level 5, 627 Chapel Street,
South Yarra, Victoria, 3141
Australia

Please also note that we are no longer using the PO Box as a postal address. All correspondence is to be mailed to our street address above.

All other details remain the same, including telephone and facsimile numbers.

Bank Account Name Change

As a result of our name change, our bank account name has also changed to LyondellBasell Australia Pty Ltd.

Please amend your records for EFT payments accordingly if you have not already done so.

Electronic Receipt of Invoices

Did you know that we can now send your invoices electronically via email?

If you are not currently receiving your invoices electronically, and would like to do so, then please contact Teresa Bulzomi via email at teresa.bulzomi@lyondellbasell.com and it can be arranged.

Customer Service

Australia

1800 332 599 – Manjula Buddhadasa - Queensland, New South Wales & South Australia
1800 332 543 – Carmel Bennett - Victoria & Western Australia
1800 671 418 – Facsimile

New Zealand

0800 480 099 – Anita Thomas
0800 264 600 – Facsimile

Credit & Account Enquiries

Australia: + 61 (3) 9829 9481 – Darcy Wolfe
New Zealand: + 64 (9) 271 1931 – Anita Thomas

Placing Orders

Orders can be placed via telephone to our customer service departments by 2pm the day prior to delivery and be confirmed to the customer service departments by facsimile's marked confirmation only. Alternatively, orders can be placed via the internet on BasellConnect on our polymers web site polymers.lyondellbasell.com. Please contact us for further information.

Head Office Location

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24 Hour Toll Free Emergency No: (Australia) 1800 816 854
24 Hour Toll Free Emergency No: (New Zealand) 0800 88 0829

Technical Information

Product Data Sheets and Material Safety Data Sheets are available on our polymers web site polymers.lyondellbasell.com, in addition to a full range of technical literature.

Bank Account Details

For AUD Payments

Bank : HSBC
Branch : 271 Collins Street
Melbourne, Victoria, 3000, Australia
BSB : 343 001
Account No. : 013531-001
Bank Swift Code: HKBAU2S

For NZD Payments

Bank : HSBC
Branch : 290 Queen Street,
Auckland, New Zealand
BSB : 30 2904
Account No : 0240225 61
Bank Swift Code: HSBCNZ2A

Before using a LyondellBasell product, customers and other users should make their own independent determination that the product is suitable for the intended use. They should also ensure that they can use the LyondellBasell product safely and legally. This document does not constitute a warranty, express or implied, including a warranty of merchantability or fitness for a particular purpose. In addition, no immunity under LyondellBasell's or third parties' intellectual property rights shall be implied from this document. No one is authorized to make any warranties, issue any immunities or assume any liabilities on behalf of LyondellBasell except in a writing signed by an authorized LyondellBasell employee. Unless otherwise agreed in writing, the exclusive remedy for all claims is replacement of the product or refund of the purchase price at LyondellBasell's option, and in no event shall LyondellBasell be liable for special, consequential, incidental, punitive or exemplary damages.

