MBAPOLYMERS

BECAUSE SUSTAINABILITY MATTERS

MBAPOLYMERS

"**Our** aim is to be the leading global plastics recycling company in the production of post-consumer recycled resins recovered from highly complex waste and to operate the most advanced plastics recycling plants in the world."

Nigel Hunton, CEO

Quality, Economics and Sustainability - our unique DNA

We are the world leader at producing post-consumer recycled plastics from end-of-life durable goods. Our pure, consistent, and reliably available materials provide our customers cost advantage and price stability. We source 100% post-consumer feedstock diverted from landfill or incineration.

Our proprietary processes use less than 20% of the energy needed to produce virgin plastics from petrochemicals, saving between 1-3 tons of CO_2 for every ton of virgin plastics we replace.

1992

Mike Biddle begins work on plastics separation

Richmond, CA - **USA**

2002

Edison Award for Innovation

2005

TIME

RED HERRING

Forbes

2006

WORLD ECONOMIC FORUM TECHNOLOGY PIONEER 2006

Intel **Environmental** Award

2009

Global Cleantech 100

2010

The Economist's INNOVATION AWARD WINNER 2010

2011

TED IDEAS WORTH SPREADING

2012

20 YEAR anniversary

The problem

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Our challenge

Less than 10% of these plastics from complex waste streams such as durable goods are currently recycled. In comparison, over 90% of the metals, such as steel, copper and aluminum, are recycled from these same complex waste streams.

The solution

MBA Polymers broke the code and figured out how to recover pure plastics from plastics rich shredder residue.

More sustainable in every sense.
Our advanced mechanical processes first separate polymeric materials from highly complex waste products, then further clean, sort and purify the resulting plastics by type and grade until they're ready for re-use in demanding applications - replacing virgin plastics and closing the loop.
We recover the most prevalent and valuable materials from our feed streams, often in multiple grades and colors:
- ABS (acrylonitrile butadiene styrene)
- HIPS (high impact polystyrene)
- PP (polypropylene)
- HDPE (high density polyethylene)
- Mixed by-product plastics
- Rubber
- Residual metals

We are changing the way the world sees plastics recycling, creating highly valuable plastic resins at a significant environmental and economic benefit to our customers – all in a sustainable way.

Feed plastics rich shredder residue into process, size reduction

Remove non-plastics (metal, rubber, wood, glass, fluff, foam, textiles, dirt, etc.)

Washing and preparation, removing non-target plastics

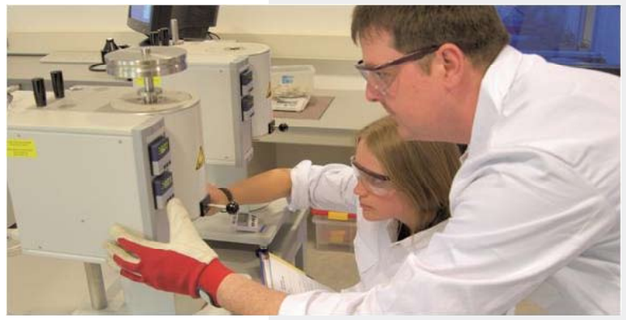
Polyolefin purification (cleaning / sorting PP and PE)

Styrenics purification (cleaning / sorting ABS & HIPS)

Formulation, blending & compounding

Quality assurance, certification and packaging

Our Technology



QUALITY

Each of our plants has a fully equipped laboratory for incoming feedstock analysis, real-time separation analysis at multiple checkpoints and testing of finished goods to ISO standards

Our global reach

CHINA

MBA Polymers China is a JV with GISE (Guangzhou Iron & Steel Enterprises), South China's largest steel company

- 20,000 sqm
- Annual processing capacity of 40,000 tons
- Feedstock is sourced from WEEE (Waste Electrical & Electronic Equipment)
- 150 employees
- Plant became operational in 2006

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Fax: +86 (0) 20-84680038

AUSTRIA

MBA Polymers Austria is a JV with Müller-Guttenbrunn, Austria's largest metal recycler

- 20,000 sqm
- Annual processing capacity of 55,000 tons
- Feedstock is sourced from WEEE
- 80 employees
- Plant became operational in 2006

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Austria
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Fax: +43 (0) 7476 77488-44

UNITED KINGDOM

MBA Polymers UK is a JV with EMR (European Metal Recycling), one of the world's largest automotive recyclers

- 60,000 sqm
- Annual processing capacity of 80,000 tons
- Feedstock is primarily sourced from ASR (Automotive Shredder Residue)
- 70 employees
- Plant became operational in 2011

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SOURCING
Our strategic focus

Electronic Shredder Residue (ESR) from e-Waste and Automotive Shredder Residue (ASR) from end-of-life vehicles

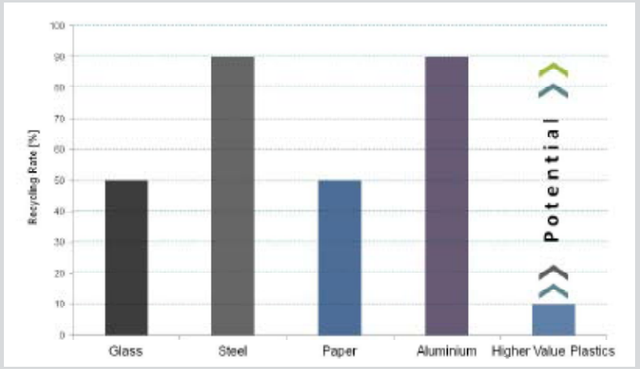
We source raw materials directly from recyclers of WEEE and ASR.
These highly complex waste streams contain moderate levels of contaminants such as metals, rubber, wood, printed circuit boards, glass, foam, foils, labels and fabrics.

The European WEEE Directive
(Waste of Electrical and Electronic Equipment) sets targets for collection, recycling and recovery of all types of electrical wastes of which plastics are a major constituent.

ASR is the non-metallic fraction of the feed material removed by the metal recyclers' shredding process.

The aim of the European Directive on End-of-Life Vehicles is to increase the rate of reuse and recovery to a minimum of 95% by 2015.

The recovery of plastics from ASR is the most significant factor in helping to achieve this target.



WEEE

Shredded WEEE

ESR

EvoSource™

Global Product Portfolio

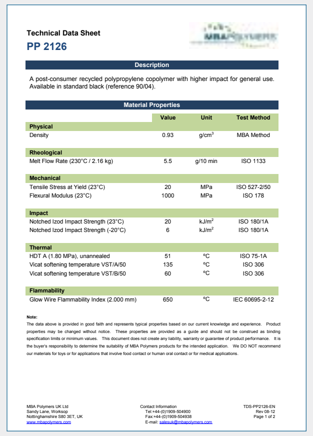
MBA offers an economic and sustainable alternative to petrochemically produced plastics with high-quality post-consumer ABS, HIPS and PP

Austria and China

Our facilities in Kematen / Ybbs in Lower Austria and Guangzhou, China, produce high-quality post-consumer ABS, HIPS and PP resins in various colors for use in electronics, appliances, consumer products, building products and even automotive components.
The product portfolios consist of various general purpose grades and premium products that are either UL-HB recognized, impact or flow modified are offered under the EvoSource™ brand.

United Kingdom

Our newest and largest plant, which is located in Worksop, Nottinghamshire, has an initial processing capacity of 60,000 tons per year and is expandable to 80,000 tons.
We enable major automobile, appliance and other durable goods manufacturers to "close the loop" and make their products more sustainable by turning this plastics-rich shredder residue into new high impact PP, filled PP, ABS, HIPS and HDPE.


Technical Data Sheet
PP 2126
Description
Material Properties

Technical Data Sheets are available on request.

Please contact us at sales@mbapolymers.com

Using our advanced products ...

Our clean-tech facilities in Austria, China and the UK have an annual processing capacity of 175,000 tons and represent the most advanced plastics recycling facilities on the planet. We are selling the purified post-consumer recycled plastics back to some of the world largest manufacturers of electronic appliances, automobiles, and office and home equipment.

Green Range vacuum cleaner components

EvoSource™ ABS 4136
Electrolux Floor Care and Small Appliances AB, Stockholm, Sweden

Office stamp components

EvoSource™ ABS 4134
Trodat GmbH, Wels, Austria

Office products

EvoSource™ HIPS 3122 E & PS 3122
Spichtig AG, Steinen Switzerland

... for demanding applications

Our unique DNA

- Sourcing 100 % post-consumer feed-stock, diverted from landfill or incineration
- Low emission and low energy manufacturing process
- Support customers to comply with external drivers, e.g. Blue Angel, EPEAT

- Price stability
- Secure supply
- Growing availability

- Batch to batch consistency
- Successfully replacing virgin plastics
- RoHS; REACH
- **EvoSource™** premium grades for applications demanding
  - UL-HB recognition
  - higher impact,
  - higher flow
  - demanding colors

Dr. Michael Biddle, Founder & President

"**Plastics are too valuable of a resource** to bury or burn. So we developed and commercialized technologies that close the loop by mining plastics and other valuable resources from some of the most complex solid waste streams on the planet and creating products that directly replace virgin materials."

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