



# History of REGAIN Polymers Limited

## About us

Formed in 1991, REGAIN Polymers Limited, specialises in recycling post-use rigid plastics to produce cost-effective products.

Based in Allerton Bywater, West Yorkshire, REGAIN Polymers has now grown to become one of the UK's leading plastic recyclers, currently operating at 45,000 Te, compared to 2,000 Te in its infancy.

Originally a recycler of post-consumer polystyrene products, REGAIN Polymers has expanded to facilitate a large variety of different rigid plastics in order to meet industry demand and deliver plastics in forms that match customer needs.

REGAIN Polymers holds a unique position within the industry through its ability to deal with difficult post-consumer, as well as post-industrial, plastic scrap with 28,000 Te of washing capability over two sites, while supplying tightly specified compounds from any of its seven extrusion lines.

In 2012, REGAIN Polymers acquired Express Recycling and Plastics based in Rainham, Essex, servicing a range of plastic waste producers helping them reduce disposal costs. Following the acquisition, the plant was renamed REGAIN Recycling and Plastics Ltd.

## Supplying global markets

REGAIN Polymers has the capability to supply its highly specified compounds to global markets.

With an ambitious and committed workforce, REGAIN Polymers is focused on applying world-class disciplines and market leading strategies to the business of plastics recycling. Doing this saves non-renewable resources and adds value to waste, complying with its core principal of 'Bringing Plastics Full Circle'.

REGAIN Polymers, an Environment Agency licensed site, is set to continue its growth and develop its capabilities in order to cater for the continually increasing demand in plastics recycling. REGAIN Polymers strives to deliver technically sound solutions and guaranteed end product quality to customers.

# Products

At REGAIN we produce a wide range of materials based on Recycled feedstocks. A sample of the products we produce can be seen in the table below, but if you do not see what you are looking for why not contact us. All the grades listed can be modified to include UV stabiliser, heat stabiliser, or for very demanding applications we can create recycled / prime blends to deliver elevated technical performance. We also offer a range of coloured materials and colourmatched blacks, all quality assured and specified to meet YOUR demands.

| Product Name                    | Grade   | Melt Flow Index (g/10min) | Notched IZOD Impact Strength (23 deg C) (kJ/m <sup>2</sup> ) | Filler Content (%) | Conversion Process  |
|---------------------------------|---------|---------------------------|--|--------------------|---------------------|
| <b>REGAIN<sup>PP</sup></b>      | A-650   | 3                         | 10   | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP</sup></b>      | A-750   | 7                         | 8  | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP</sup></b>      | A-850   | 12                        | 8  | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP</sup></b>      | A-950   | 18                        | 5  | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP</sup></b>      | A-050   | 25                        | 5  | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP Plus</sup></b> | A-85Q   | 12                        | 12   | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP Plus</sup></b> | A-85R   | 12                        | 15   | -                  | Injection Moulding  |
| <b>REGAIN<sup>PP Plus</sup></b> | A-85V   | 12                        | 19   | -                  | Injection Moulding  |
| <b>REGAIN<sup>PPT</sup></b>     | A-75T10 | 7                         | 4  | 10                 | Injection Moulding  |
| <b>REGAIN<sup>PPT</sup></b>     | A-85T13 | 12                        | 4  | 13                 | Injection Moulding  |
| <b>REGAIN<sup>PPT</sup></b>     | A-85T20 | 12                        | 4  | 20                 | Injection Moulding  |
| <b>REGAIN<sup>PPT</sup></b>     | A-95T20 | 18                        | 4  | 20                 | Injection Moulding  |
| <b>REGAIN<sup>PPT</sup></b>     | A-85T40 | 12                        | 7  | 40                 | Injection Moulding  |
| <b>REGAIN<sup>HDPE</sup></b>    | H-450   | 0.35                      | 5  | -                  | Pipe Extrusion      |
| <b>REGAIN<sup>HDPE</sup></b>    | H-450   | 0.35                      | 5  | -                  | Sheet Extrusion     |
| <b>REGAIN<sup>HDPE</sup></b>    | H-450   | 0.35                      | 5  | -                  | Blow Moulding       |
| <b>REGAIN<sup>HDPE</sup></b>    | H-750   | 5                         | 4  | -                  | Injection Moulding  |
| <b>REGAIN<sup>ROTO</sup></b>    | U-750   | 5                         | 4  | -                  | Rotational Moulding |
| <b>REGAIN<sup>HIPS</sup></b>    | I-750   | 6                         | 7  | -                  | Sheet Extrusion     |
| <b>REGAIN<sup>HIPS</sup></b>    | I-750   | 6                         | 7  | -                  | Injection Moulding  |

# Identification of Plastics

## Visual Aids to Plastics Identification

In 1988 the Plastic Bottle Institute of the Society of the Plastics Industry established a system for identifying plastic containers by plastic type. The purpose of the “chasing arrows” symbol that appears on the bottom of many plastic containers is to promote plastics recycling. The chasing arrows enclose a number, which aids in the plastics identification and sorting process.



### 1 PET (polyethylene terephthalate)

Used in soft drink bottles and mineral water bottles, in fibrous form can be used as filling for sleeping bags, pillows and textile fibres.



### 5 PP (poly-propylene)

Used in some ketchup bottles, plastic screw tops, hinged lunch boxes, milk and beer crates, car components, car battery cases.



### 2 HDPE (high-density polyethylene)

Used in milk, water, juice, soap and laundry product bottles, also used in the production of milk crates & pipes, etc.



### 6 PS (polystyrene)

Used in solid form (known as High impact Polystyrene HIPS) for injection mouldings (e.g. coat hangers, audio & video cassettes), as well as in packaging (e.g. yoghurt pots). Expanded polystyrene (EPS) is familiar to us as shaped packaging used to protect goods, as heat insulation and in some food packaging.



### 3 PVC (poly-vinyl chloride)

Used in some cooking oil bottles, water bottles, film for meat packaging, plumbing pipes & fittings, garden hose etc.



### 4 LDPE (low-density polyethylene)

Used in film products such as bags, or in flexible lids for margarine tubs, ice-cream containers, and building applications such as damp proof membrane.

### 7 OTHER (all other resins & mixes of plastic)

Used in acrylic, nylon, complex composites and laminates, the uses of which are diverse & many.

# Sourcing

## We buy....

We buy the following grades of rigid plastic waste:

**Polyethylene (PE)**

**Polypropylene (PP)**

**High Impact Polystyrene (HIPS)**

These materials can be either scrap, shred, regrind or pellet.

Examples include:

automotive parts and batteries, bottles, buckets, caps, crates/trays, locator boards, pipe, post production waste, tote boxes, wheelie bins.

We prefer clean, single stream material, but our washplant can handle dirty or post consumer waste.

## Get in touch

If you have rigid plastic waste to sell please contact our Purchasing Department on **+44 (0)1977 604080** or use our contact form. In order to determine a value we will require details of the material type, volume/weight, condition, packaging and geographical location.

We can also undertake toll processing of your own rigid scrap into clean pellet for future use. Please contact our Sales Department on **+44 (0) 1977 604080** or use the contact form for details.

For more information contact:

**[Elizabeth.Hutchinson@regainpolymers.com](mailto:Elizabeth.Hutchinson@regainpolymers.com)**

**[Stephanie.Harding@regainpolymers.com](mailto:Stephanie.Harding@regainpolymers.com)**



# REGAIN Recycling & Plastics Ltd

## REGAIN Recycling

Formed in 2011 following the purchase of Express Recycling & Plastics, REGAIN Recycling & Plastics Ltd offers a wide range of services to the Plastics Recycling sector from waste plastic consultancy through to the production of high quality plastic regrinds for sale to manufacturers throughout Europe.

We take in most grades of PE, PP, PS and ABS rigid plastics for reprocessing on our sophisticated wash granulation lines and can remove contaminants from single polymer streams or clean, grind and separate mixed rigid plastics into its constituent parts. We may also be able to help in finding markets for other types of plastic waste materials that we ourselves do not process.

A large proportion of the materials we process are used by our Compounding business, REGAIN Polymers Limited based at Castleford, West Yorkshire, the balance being sold on to other plastics compounding and manufacturing businesses throughout Europe. We can provide expert advice on all aspects of waste plastic processing and the regulatory environment that surrounds this activity and are able to handle everything for you from logistics, through the operational and recycling process to the production of clean saleable regrinds.

REGAIN endeavours to provide a comprehensive plastics recycling service to all Local Authorities, Waste Management Companies and Recycling Businesses alike through the utilisation of established and proven technology coupled with many years recycling experience complemented and supported by consistent and thorough customer care.

## Materials

|                                 |     |  |
|---------------------------------|-----|--|
| Polypropylene                   | PP  | Car bumpers<br>Containers, crates and boxes<br>Packaging     |
| Polyethylene                    | PE  | Toys<br>Chemical drums<br>Wheeled bins<br>Gas / water piping |
| Polystyrene                     | PS  | Seed trays<br>Automotive parts<br>Packaging                  |
| Acrylonitrile-butadiene-styrene | ABS | Automotive parts<br>Moulded parts                            |