

Vynacol[®] colour masterbatch for PVCu

'Colouring rigid PVC has never been easier'



A perfect match to your colour and your process

Vynacol® has revolutionised the colouring of PVCu. It eliminates all the compatibility and processing issues historically associated with adding colour to PVCu. Processors will find Vynacol® makes adding colour to PVCu as easy as colouring any other polymer. It's foolproof and totally reliable.

Think limitless colouring opportunities, bright vibrant colours and unblemished finishes every time. Formulations can include physical property enhancements too, such as heat reflecting infrared pigments, uv protection and antistatic performance.



Using masterbatch introduces the opportunity to reduce stocks of coloured compounds and gives you the freedom to buy natural grades where and when you want them.

How you can benefit from using Vynacol®

- **Easy to use, reliable**, patented colouring technology
- Enables **flexible production procedures**
- **Improves processing**
- **Enhances** surface finish, **gloss and impact strength**
- Can be tailored to include **functional additives** such as antistatic or UV protection as well as **infrared heat deflecting pigments**
- **Meets EU standards** for food and toy products
- Can be supplied in **granular or prill form**
- **Compatible with** all volumetric and gravimetric **dosing systems**
- Suitable for adding colour to **recycled polymers**
- Offers the potential for **significant cost savings**

Tap into these benefits now. Ask us for a trial sample

Heard it all before?

You may well have because Vynacol® has been delivering these benefits for over a decade. Vynacol® broke new ground when it was launched in 2000. Indeed, during its infancy it was almost too radical and struggled to overcome the mindset of some long established PVC processors.

The fact is that from day one Vynacol® has lived up to its promises and virtually everyone who has trialled it has purchased production quantities.

Development has been continuous and today the masterbatch can be tweaked to suit almost any technical and/or processing requirement.



Maybe it's time to take a fresh look at your colouring strategy?

How Vynacol® works

The secret is in the formulation which avoids using any ingredients that affect material flow, physical properties and surface finish.

Although universal and polymer specific masterbatches for flexible PVC have been available for many years they have never worked reliably in PVCu because of its inherent processing difficulties. PVC is an extremely versatile polymer but it is very heat sensitive and highly resistant to flow during its melt phase. As a result processors have always had to find just the right grade for their particular plant and application. Consequently there are literally thousands of PVC formulations on the market incorporating varying amounts of additives and featuring different levels of compounding. Every grade has been developed to meet specific performance and processing requirements, or both!

Generally, masterbatches are made by subjecting relatively high loadings

of pigments and polymer to high shear forces such as in a twin screw masterbatch extruder. When this polymer is PVCu it can easily overheat causing the polymer to thermally degrade and produce choking fumes of HCl (hydrochloric acid). Prior to the introduction of Vynacol®, PVCu polymer specific masterbatches containing large quantities of pigment had not been available.

Conversely, polymer specific masterbatches for flexible PVC contain plasticisers. Although this does not present compatibility problems when used in rigid PVC, users are, in effect, adding plasticisers to a polymer chosen specifically for its unplasticised characteristics. This can lead to application failure due to plasticizer migration and changes in physical properties in the final product.

Vynacol® PVCu polymer specific masterbatch is different because it works well both in rigid and flexible grades without any compatibility or homogenisation problems.



How we ensure Vynacol® is made to your exact requirements

You need to tell us about the colour you require, your application and the type of process you will use to manufacture your product. Obviously quantity is important too.

Comprehensive data on end use is essential.

For example, will the product be used for toys or packaging, will it be in contact with potable water, does it require FDA approval and do any RoHS or WEEE directives need to be taken into account, will products be used indoors or outside? Will performance enhancing additives, such as antistatic, slip or uv stabilizer, be required?

We will agree colour standards, sampling regime and form of supply – granular or prill – whatever best suits your production set up.

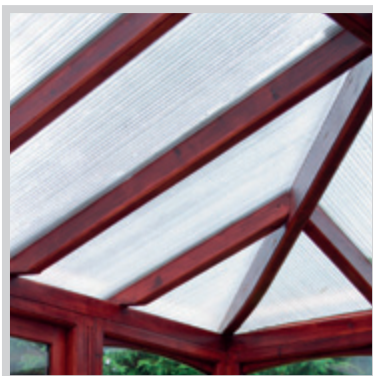
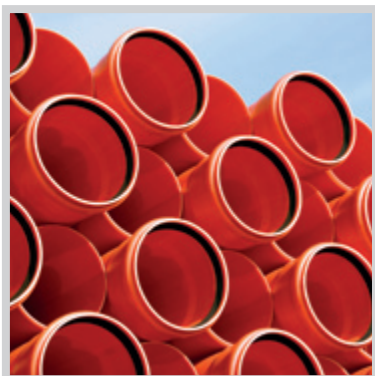
Where can it be used?

Vynacol® masterbatch is suitable for use with most plastics processes including injection and blow moulding; profile, film and sheet extrusion.

Customers in the **UK, Europe, North America, South America** and the **Pacific Rim** have successfully coloured PVC materials with Vynacol® for use in many long running successful applications in the building, packaging, furniture, electrical and general purpose mouldings and profile extrusion sectors.

Typical product groups include:

- Pipe & Rainwater goods
- Glazing profile/mouldings
- Decking products
- Cladding/soffits/sills
- Glazing sheet - corrugated and flat
- Fence posts
- Packaging film and sheet
- Furniture profile and edge strips
- Electrical trunking and mouldings
- General purpose mouldings and extrusions



Heat reflecting colours open up new markets for processors



Products coloured with Vynacol® polymer specific PVCu masterbatches incorporating the latest heat reflecting infrared pigment technology enable any colour to be used successfully while offering temperature performance profiles of up to 40% lower than conventionally coloured materials.

Conventional pigments fade, especially darker shades and retained heat causes thermal expansion and physical degradation which leads to distortion and product failure.

As our planet warms up and temperatures and light energy increase so does the market for heat reflective plastics. Recent applications include roofline products such as guttering and soffits, furniture, leisure and agricultural goods as well as automotive industry components.

Reducing costs, solving problems and increasing manufacturing flexibility



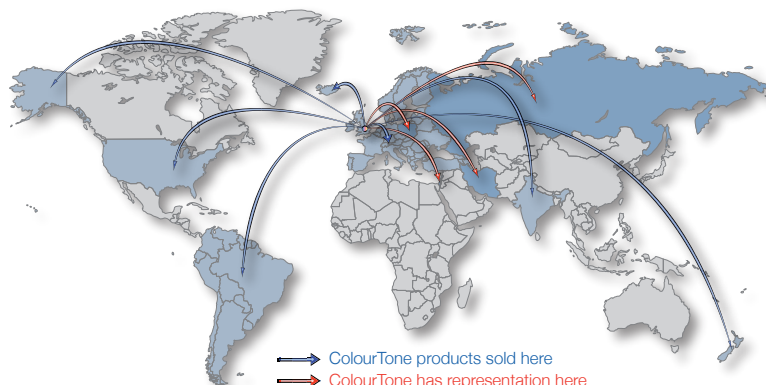
A technical injection moulding specialist who produces ventilators for window systems reduced stock, increased manufacturing flexibility and solved moulding problems by switching from coloured PVCu compound to natural resin coloured with Vynacol® masterbatch.

Ready to try Vynacol®?

Wherever you are, whether you are experiencing quality or processing problems with your current compound or colouring system or looking for ways to make your production more cost effective, Vynacol® offers an impressive set of benefits.

Request a sample that works for you

Call our customer service team for guidance or technical advice, email paul@colourtone-masterbatch.co.uk or complete the colour match form on our website <http://www.colourtone-masterbatch.co.uk/>



About Colour Tone Masterbatch



Set up in July 1996 Colour Tone Masterbatch is an innovative, award winning company that focuses on delivering a responsive, high quality service for bespoke colours, in universal, commodity and engineering polymers, as well as custom additive blends.

Custom colours to an exact match are delivered in less time than it takes to get a standard off-the-shelf universal product.

Colour Tone masterbatches are suitable for use in most plastics processes including injection and blow moulding, profile and sheet extrusion as well as film and fibres. As such they add market presence and competitive edge through unique, vibrant colours as well as physical properties and processing benefits that contribute to the successful performance of many products.

Extensive laboratory facilities and modern plant provide the flexibility to meet customer demands for colour matching and sampling through to manufacture as well as the tools to develop new products.



Colour Tone Masterbatch Ltd

Unit D, Pant Glas Farm Industrial Estate, Bedwas, Caerphilly CF83 8YE. UK

Telephone: +44 (0) 2920 888910 Fax: + 44 (0) 2920 868487

Email Email@colourtone-masterbatch.co.uk www.colourtone-masterbatch.co.uk

Vynacol® – the world's leading polymer specific colouring system for PVCu