**ColorMatrix**™ **rePrize**™

Liquid dispersion chain extender for PET monolayer, multilayer and foamed sheet

**PRODUCT DESCRIPTION**

ColorMatrix™ rePrize is a PET compatible formulated liquid dispersion, designed to increase the polymer chain length via reactive extrusion. This results in an increase in both the polymer intrinsic and melt viscosity.

rePrize is suited to applications in:
- PET monolayer sheet
- PET multilayered sheet
- PET foamed sheet

rePrize can be used to optimise sheet manufacturing processes and product quality, whilst allowing for increased levels of recycle, contributing towards improved sustainability and reduced costs.

**IMPACT**
- Higher productivity
- Reduced cost
- Improved sustainability

**PRODUCT BENEFITS**
- Increased product strength
- Improved low temperature performance
- Reduced brittleness

**PROCESS BENEFITS**
- Improved melt flow consistency
- Improved IV consistency
- Increased recycle content
- Reduced rejects and scrap

**GLOBAL REGULATORY APPROVALS**

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<th>PRODUCT</th>
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**PRODUCT MONO/MULTI LAYERED SHEET**

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**COLORMATRIX™ rePrize™**

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**ColorMatrix** rePrize™ is a PET and PC compatible formulated liquid dispersion chain extender. Added to the feed throat and designed to increase the polymer chain length via reactive extrusion, rePrize enables an increase in both the polymer intrinsic and melt viscosity.

**Benefits of using rePrize include:**
- Increased product target IV
- Improved melt flow consistency
- Increased recycle content
- Reduced brittleness
- Reduced rejects and scrap
- Improved low temperature performance

rePrize can be combined with other liquid additives and can be used to optimize sheet manufacturing processes and product quality, whilst allowing for increased levels of recycle, contributing towards improved sustainability and reduced costs.

**INCREASED RECYCLE CONTENT**

rePrize can be used to replace virgin PET in PET sheet, when virgin PET is used in combination with PCR flake or regrind, to increase the IV. This allows for higher levels of PCR flake or regrind to be used.

**PROCESS HIGHLIGHTS**

**FEATURE** | **BENEFIT** | **IMPACT**
---|---|---
- Liquid technology | ▶ More accurate dose control | ▶ Reduced cost
- More variation in melt flow and product IV | ▶ Can be coupled to an on-line densimeter | ▶ Higher productivity
- Shorter transition times | ▶ Does not require pre-drying | ▶ Cleaner working environment
- Less dust | | 
- Higher IV in melt phase | ▶ Eliminate/reduce solid phase polymerization (dPET) | ▶ Reduced cost
- Improved uniformity when replacing virgin PET in PCR sheet | ▶ Increased use of post consumer flake or re-grind (Sheet) | ▶ Reduced cost
- Reduced brittleness, less blemishes and crimp | | ▶ Reduced dust
- More consistent melt flow | ▶ Eliminate/reduce solid phase polymerization (rPET) | 

**PRODUCT BENEFITS**
- Improved impact strength
- Improved low temperature performance
- Reduced brittleness
- Improved aesthetics

**PROCESS BENEFITS**
- Increased final IV
- Less variation in product IV
- More consistent melt flow
- Increased use of flake or regrind
- Shorter transition times
- Reduced scrap
- Reduced dust

**IMPACT**
- Reduced cost
- Higher productivity
- Cleaner working environment
- New product designs and applications
- Improved shelf appeal

**PET SHEET**

**PROCESS HIGHLIGHTS**

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