COLORMATRIX[™] rePrize[™]

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



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

PET SHEET

PROCESS BENEFITS

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

PRODUCT BENEFITS

- Improved impact strength
- Improved low temperature performance
- Reduced brittleness
- Improved aesthetics

IMPACT

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

PET MONO/MULTI LAYERED SHEET

PROCESS BENEFITS

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

PRODUCT BENEFITS

- Increased product strength
- Improved low temperature performance
- Reduced brittleness

IMPACT

- Higher productivity
- Reduced cost
- Improved sustainability

XPET FOAM SHEET ROUND DIE

PROCESS BENEFITS

- Increase final IV
- Increased use of regrind
- Impossible to start up without it
- Faster product changeover
- Easier to cut

PRODUCT BENEFITS

- Increased strength
- Lighter weight
- Good sealing

IMPACT

- Lighter weight, higher strength
- Reduced cost
- Properties comparable to PS packaging
- Recyclable



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

GLOBAL REGULATORY APPROVALS

PRODUCT	FDA	EU	GB	MERCOSUR
rePrize	•	•	•	•

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