

GENERAL NOTICE
Technical Sheet

SUBJECT

The purpose of this data sheet is to assess the impacts of non-opacifying colourings on the French coloured PET stream according to different colours and for different intensities and market penetration rates.

GENERAL OPINION

This general opinion follows on from that expressed in FT 20. The studied applications are: strapping, fibre, sheeting and bottles.

These assessments were made with respect to the PET coloured stream with green output as it contains mostly blue and green bottles. Concentration/penetration rates are valid for this case only.

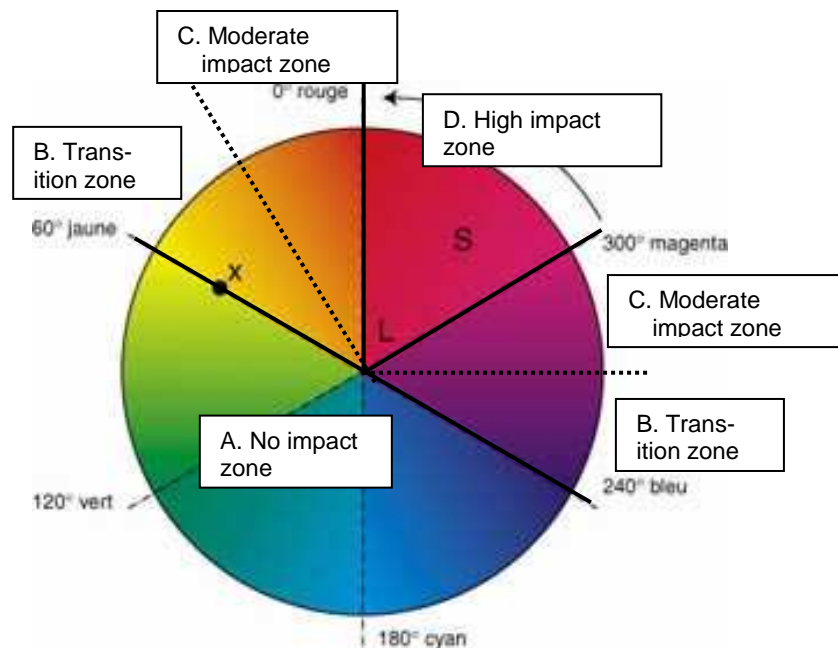


Illustration for L value from 55 to 65

Yellow and violet (zone B) do not raise any problems at the studied market concentrations/penetrations. COTREP recommends a prior study for high intensities (pigment concentration in masterbatch / high utilisation rates).







Amber, orange and pink (beginning of zone C), above a certain intensity, raise problems in bottle/strapping applications.

Red (zone D), at the studied intensity, raises problems for at least two applications, regardless of its penetration rate.

COTREP recommends not using red colouring or red derivatives such as pink, orange or amber.

IMPACT SUMMARY TABLE

Tests were conducted on a mixture of PET flakes coming from the Q5 stream, i.e. the French coloured stream.

Colour	Equivalent pantone	Intensity Concentration	Market penetration	Impact	COTREP qualitative opinion
Amber	139c	Light	5%	∅	Slight browning. No significant impact in any applications
			10%	∅	Slight browning. No significant impact in any applications
	504c	Dark	5%	∅	Slight browning. No significant impact in any applications
			10%		Slight impact in bottle/strapping applications
Violet	2655c	Light	5%	∅	Bluing. No significant impact in any applications
			10%	∅	Bluing. No significant impact in any applications
	267c	Dark	5%	∅	Bluing. No significant impact in any applications
			10%	∅	Bluing. No significant impact in any applications
Pink	244c	Light	5%	∅	No significant impact in any applications
			10%	∅	No significant impact in any applications
	2395c	Dark	5%	∅	No significant impact in any applications
			10%		Change in final colour, blue outcome. Deterioration in finished product.
Red	nd	Dark	5%		Deterioration in finished product. Acceptability limit for bottle/strapping applications.
			10%		Deterioration in finished product. Acceptability limit for bottle/strapping applications.
Orange	144c	Light	5%	∅	Browning. No significant impact in any applications
			10%	∅	Browning. No significant impact in any applications
	021c	Dark	5%		Slight impact in bottle/strapping applications
			10%		Deterioration in finished product. Acceptability limit for bottle/strapping applications..
Yellow	388c	Light	5%	∅	Yellowing. No significant impact in any applications
			10%	∅	Yellowing. No significant impact in any applications
	3965c	Dark	5%	∅	Yellowing. No significant impact in any applications
			10%	∅	Yellowing. No significant impact in any applications



 Caution ∅ No impact