

TECHNICAL NOTICE - SORTING

Detectability of Elixance / MT48855 colorant solution at sorting centers

APPLICATION DESCRIPTION

General information

APPLICANT	Elixance
APPLICATION DATE	2026
REFERENCE OF THE COLORANT SOLUTION	MT48855
MIN AND MAX LIMIT FOR CONCENTRATION OF THE COLORANT SOLUTION	5%



Description of colorant solution

COLOR	Noire
SOLUTION SUITABLE FOR	PET rigid packaging

Purpose of the application

To test the detectability at French sorting centers of the Noire colorant solution MT48855, which is provided by Elixance and use to colour PET rigid packaging.

This Notice relates to the detectability of the colorant solution and not to its whole behaviour in a French sorting center, nor on its recyclability.

TECHNICAL CONCLUSIONS

Given the evidence provided to COCET, and in view of the results presented in the test reports from optical sorting (O.S.) equipment manufacturers, Elixance Noire colorant solution MT48855 is detectable by optical sorting in conditions representative of the technology used in French household packaging waste sorting centers.

Use of a 5% of this colorant solution in PET rigid packaging will enable it to be detected and channeled to the PET packaging stream with a satisfactory level of performance.

Although COCET is issuing a positive opinion regarding the detectability of Elixance Noire colorant solution MT48855, this opinion provides no indication of the recyclability of the packaging as a whole.

This notice is valid when the colorant solution:

- Is used in the manufacture of PET rigid packaging;
- Has a proportion of 5%;
- Is not used with production scrap, other colorant solutions or recycled materials potentially containing carbon black.

COCET reserves the right to review its opinion if the company modifies the packaging composition of the colorant solution, for example:

- Modification of the resin¹
- Use of recycled materials and/or production scrap that may contain carbon black

¹ Here, the term "resin" refers to the type of polymer used, namely PP, PET, HDPE, or PS. The opinion remains valid in the event of a change of supplier for the tested polymer type.

- Modification of the coloring solution and/or its incorporation rate

FIND OUT MORE

The extension of sorting guidelines to all plastic packaging has led to the modernization of sorting centers in France. In particular, centers are automating their processes and acquiring optical separators using near infrared technology.

This step in the sorting process is critical to separating plastic packaging. It enables packaging to be sorted by resin and color.

At this step in the sorting process, undetectable packaging is rejected by sorting centers and sent for energy recovery.

Carbon black pigment, which is currently widely used for dark-colored packaging, absorbs infrared light emitted by the optical sorting equipment and returns no signal. Consequently, the packaging is not detected and therefore neither sorted nor recycled.

Elixance Noire colorant solution MT48855 used to colour PET rigid packaging offers an alternative to undetectable colorant solutions. The results of static and dynamic tests performed at the test centers of the two O.S. manufacturers (PELLENC SA and TOMRA) according to the COCET procedure were positive. The PET rigid packaging containing 5% of Noire colorant solution MT48855 was detected and channeled to the PET stream with the same level of performance (quality, capture rate) as other rigid PET household packaging waste.

The conclusions set out in this notice are based on a set of commitments undertaken by each of the parties indicated below.

Elixance undertook to :

- Use the sorting procedure provided by COCET ("COCET optical sorting test procedure for assessing the detectability of dark packaging at optical sorting stages" - version of June 2026);
- Perform tests on the premises of two O.S. manufacturers representative of existing sorting facilities in France;
- Submit test reports to COCET for its analysis and opinion;
- Offer a colorant solution that :
 - o Meets the essential requirements of the Packaging and Packaging Waste Directive (92,5/62/EC).
 - o Does not alter the density of the packaging: the density of packaging mainly consisting of PP or PE must be < 1 and > 1 for packaging mainly consisting of PET or PS (excluding PSE, XPS).

The O.S. manufacturers made an undertaking to COCET to:

- follow the procedure in its entirety;
- perform tests using technologies and machine settings representative of those used in current sorting centers and under normal operating conditions.

Paris, 21/07/2026

