

## **FAQ black and dark packaging containing carbon black (04/09/2023)**

Note: sorting and recycling technologies are constantly evolving, therefore, the Design for Recycling guidelines evolve too. Please make sure you have the latest version of this file, by verifying the date of the last update on Fost Plus' website.

### **Is carbon black pigment recommended for packaging, in terms of circularity?**

No, you should avoid using carbon black pigment because it does not allow the packaging to be correctly sorted by Near Infrared (NIR) polymer detectors in Belgian sorting centers. Therefore, most of this packaging ends up in the bales of residue going to incineration.

### **Is carbon black ink recommended for packaging, in terms of circularity?**

If the ink is used to print a text or a logo, it should not hinder the detection of the packaging by the NIR detectors. However, if the packaging is printed on most of its surface with dark ink containing carbon black, it will have an impact on the quality of detection and therefore on the recyclability.

### **What are possible alternatives ?**

- Favor other colors of packaging (ideally, the less coloration, the better);
- Use alternative black pigments that can be recognized with NIR technology, although not as well as lighter-colored pigments. The darker the packaging, the more difficult the detection and thus the higher the risk of some packaging being sent to the residue (i.e. incineration);
- If you have a doubt, Fost Plus can test your packaging on the sorting lines.

### **Is there a preference in colors for recycling purposes?**

Dark-colored recyclates generally have a significantly lower value than the uncolored or light-colored recyclates due to the lower range of end-applications, limited by the color restriction. Consequently, light colors of packaging are generally preferred for recyclability.

### **Is there an advise on the usage of inks and pigments for recycling purposes?**

Try to keep the amount of inks and pigments as low as possible.