

New Bio-Compostable Color Masterbatch for "Difficult to Recycle" Parts

Chroma Color's customer was looking for a partner to come up with a color masterbatch using a PHA (polyhydroxyalkanoates) biobased polyester that would comply to \***ASTM D-6400/\*DIN EN13432** Bio-Composting standards.

The Chroma Color Technology team was able to develop three new colors for our customer using a specifically designed carrier resin for a masterbatch: 410R0001SC41CO-F **Orange 50/1** 

41RD0001SC41CO-F 41WH000141CO-F Orange 50/1 Red 50/1 White 50/1

\*ASTM D6400 outlines the standard requirements for the biodegradation of solid materials through composting, specifically tailored for labeling plastics intended for aerobic composting in municipal or industrial settings.

\*DIN EN 13432 specifies the requirements and procedures for determining the compostability and aerobic treatability of packaging (and its materials). **About: PHA's** are a family of biobased and biodegradable polyesters made by bacterial fermentation. PHACT biopolymers were chosen

for this project are plant-based and feature a sustainable manufacturing process. Alone or when blended with other polymers, they dramatically improve environmental characteristics while enhancing physical properties in a broad range of consumer applications.

This material is considered to be thermally stable in the normal and customary processing range of 185-200 C°. Extended polymer and concentrate residence time in the process equipment may require that process temperature profiles be reviewed and/or adjusted to insure a proper and suitable product.

For more information <u>https://chromacolors.com</u>