

# Rigid Packaging Solutions Guide

Masterbatches for:

- Olefin Bottles
- PET Bottles
- Caps, Closures, Pumps
- Thermoforming

Virtual Color Consultation  
and Color Insights

R&D/Analytical Resources

**AMPACET**  
Plastics Reimagined™

# AMPA CET



IBM Olefin bottles



EBM Olefin bottles



ISBM PET bottles



Caps, Closures, Pumps



Thermoforming



Virtual Color Consultation and Color Insights



R&D/Analytical Resources



About Ampacet



# IBM Olefin Bottles

Ampacet offers a wide selection of masterbatches used in injection blow molded packaging. Formulated for superior dispersion and core rod release, these products are ideal for threaded bottles commonly used in pharmaceuticals, nutraceuticals and food packaging.

Description	Primary Application	Details	Carrier	Regulatory	Code
White	Pharmaceutical Packaging	70% TiO <sub>2</sub>	LLDPE	FDA	11748
White	Pharmaceutical Packaging	70% TiO <sub>2</sub>	PP	FDA	111040
White	Pharmaceutical Packaging	50% TiO <sub>2</sub>	LLDPE	FDA	11070
White	Pharmaceutical Packaging	50% TiO <sub>2</sub>	LDPE	FDA	11078
White	Pharmaceutical Packaging	50% TiO <sub>2</sub>	PP	FDA	11343
FDA Black	Pharmaceutical Packaging	40% Carbon	LLDPE	FDA	191029
Kosher FDA Black	Pharmaceutical Packaging	40% Carbon	PP	FDA	191114
Core Rod Release	Core Rod Release	Proprietary	LDPE	FDA	100664
Core Rod Release	Core Rod Release	Proprietary	PP	FDA	100665

# EBM Olefin Bottles

Ampacet stocks an extensive range of masterbatches for high volume output extrusion blow molding applications, all formulated to deliver low cost and high impact. Ampacet's lab can help customers optimize their masterbatch usage for multi-layer applications.



Description	Primary Application	Details	Carrier	Regulatory	Code
White	General Use	High Load	LLDPE	FDA	11748-N
White	General Use	Engineered White	LLDPE	FDA	110017-A
Safari White	Dairy, Nutrient Rich Contents	Light Blocking	LLDPE	FDA	111682
Blue White	Bleach Bottles	Proprietary	LLDPE	FDA	11744
Black	Oil Bottles General Use	50% Carbon	LLDPE	HMF	19501
Black	General Use	50% Carbon	LLDPE	HMF	19673-GR
FDA Black	FDA Applications	40% Carbon	LLDPE	FDA	191029
NIR Black	APR Sorting Applications	REC NIR Black	LLDPE	HMF	1900504-N
Antistat	General Use Antistat	Amine AS	LDPE	FDA*	10053
Antistat	Antistat For Dust Control	Proprietary	EMA	FDA	104355-NA
UVA	UV - Content Protection	10% UVA	LLDPE	FDA	100977
UVI	UV - Resin Protection	10% UVI	LDPE	FDA	100600

\*With restrictions



**ColorSave® 1000** is the only gravimetric feeder with the Smart-Clean feature to automatically purge colorant in seconds between runs. ColorSave 1000 also features an Outer Protective Shell with an inner floating hopper and single-point load cell so you can confidently feed expensive colors and additives at the lowest possible LDR.



# PET Bottles

Ampacet masterbatch solutions for PET bottles run from stock white, black and additives to custom colors. PET is a unique substrate that requires specialized masterbatches to optimize processing efficiency and package performance.



Description	Primary Application	Details	Carrier	Regulatory	Code
White	General Use	50% TiO <sub>2</sub>	PET	FDA	712474-NA
Black	General Use	15% Carbon	PET	FDA	7900002-N
Black	General Use	25% Carbon	PET	FDA	7900015-N
NIR Black	APR Sorting Applications	REC NIR Black	PET	FDA	7900107-NB
UVA	UV - Content Protection	Proprietary	PET	FDA	7000163-N



**ColorSave®-Micro** is the first gravimetric feeder for micro molding and extrusion applications. The outer shell protects the load cell and inner hopper from vibrations and impacts, resulting in  $\pm 0.5\%$  accuracy—down to a single pellet and up to 10 lbs/hr.



# Caps, Closures, Pumps

Ampacet offers a wide array of stock white and additive masterbatches, as well as custom combination products, to improve functionality, enhance aesthetics, and lower costs for cap, closure and pump manufacturers.



Description	Primary Application	Details	Carrier	Regulatory	Code
White	General Use	70% TiO <sub>2</sub>	LLDPE	FDA	11748
White	General Use	70% TiO <sub>2</sub>	PP	FDA	111040
White	General Use	50% TiO <sub>2</sub>	LLDPE	FDA	11070
White	General Use	50% TiO <sub>2</sub>	LDPE	FDA	11078
White	General Use	50% TiO <sub>2</sub>	PP	FDA	11343
FDA Black	General Use	40% Carbon	LLDPE	FDA	191029
Kosher FDA Black	General Use	40% Carbon	PP	FDA	191114
Mold Release	General Use	Proprietary	LDPE	FDA	100664
Mold Release	General Use	Proprietary	PP	FDA	100665
Antistat	Antistat For Dust Control	Proprietary	EMA	FDA	104355-NA
Slip	Blow Bloom Slip	5% Erucamide	LLDPE	FDA	10090-P



**BlendSave**<sup>®</sup> central blending and automated material distribution system blends up to 40 materials, up to 50 machines, and at rates up to 6,600 lbs/hr and can deliver any recipe, to any machine, at any time. BlendSave automates material distribution to the machines... no more manifolds or hoses to switch.

# Thermoforming

Ampacet stocks masterbatches in a variety of polymers to support high speed thermoform production. In addition to standard white and black products, Ampacet offers an extensive portfolio of additive masterbatches to improve manufacturing and product performance.



Description	Primary Application	Details	Carrier	Regulatory	Code
White	General Use	70% TiO <sub>2</sub>	PP	FDA	111040
White	General Use	70% TiO <sub>2</sub>	GPPS	FDA	6100056-N
White	General Use	50% TiO <sub>2</sub>	PET	FDA	712474-NA
FDA Black	General Use	40% Carbon	LLDPE	FDA	191029
Kosher FDA Black	General Use	40% Carbon	PP	FDA	191114
FDA Black	General Use	40% Carbon	GPPS	FDA	6900008-N
Black	General Use	15% Carbon	PET	FDA	7900002-N
Black	General Use	25% Carbon	PET	FDA	7900015-N
UVA	UV - Content Protection	10% UVA	LLDPE	FDA	100977
UVA	UV - Content Protection	Proprietary	PET	FDA	7000163-N



**DualSave**<sup>®</sup> precision double dosing system uses a single control to regulate two feeders connected to a single neckpiece. DualSave assures consistent and precise operation for either gravimetric or volumetric feeding to significantly reduce rejects and improve quality.



# Virtual Color Consultation and Color Insights

Ampacet offers more than innovative masterbatches. Our customers can take advantage of complete color management services-- from ideation sessions to help create the perfect color or effect, through matching colors to brand standards, even when using PCR, to testing prototypes in a variety of real-world production processes.



## Insight and Innovation Services

Ampacet professionals forecast emerging trends that influence consumer preferences for package designs. We also provide customized market palettes and intelligence reports to maximize category and product differentiation.



## Virtual Color Consultation

Real-time color consultation takes you from concept to prototype faster than ever. Our cross-functional color expertise and virtual color matching technology give you a competitive edge.

- 1 Color Match Requested**
- 2 Online Consultation**
- 3 Color Sample Delivered**



# R&D/Analytical Resources

Ampacet provides full-service process labs, testing facilities and analytical capabilities. We test under real world conditions to deliver a customer-focused approach.



## Process Labs

- Twin and single screw extruders
- Banbury mixers
- Monolayer blown film lines
- 3-layer A/B/C blown film line
- Monolayer cast film line
- Xenon arc, QUV weathering
- Injection molding
- Elemental nitrogen analyzer

## Physical Testing Lab

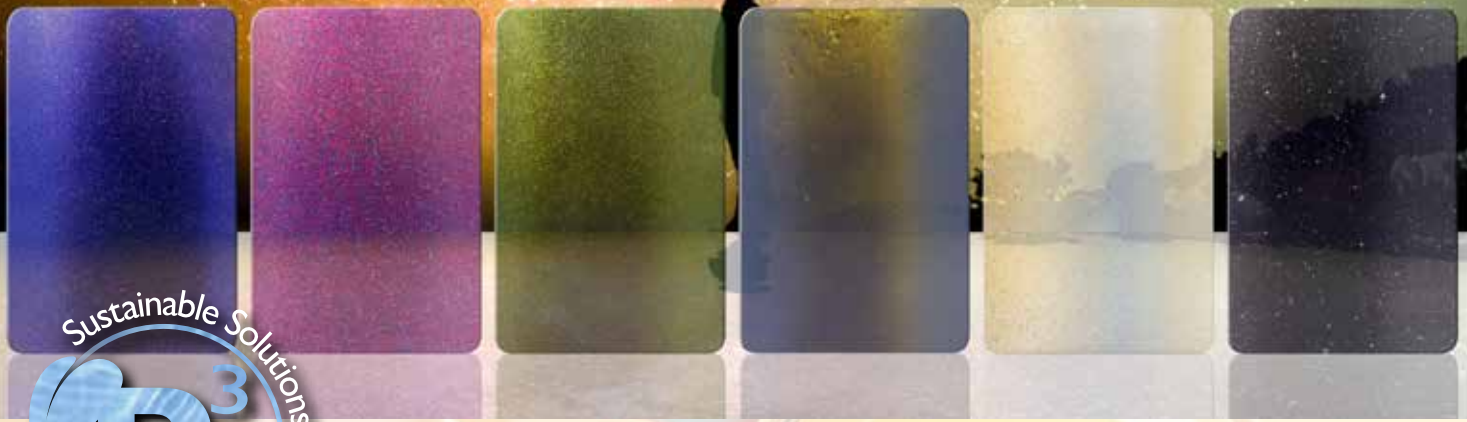
- Instron, blocking force
- Coefficient of friction
- Static decay, resistivity
- Haze / LTM / Gloss
- Optical microscopes
- Tensile/elongation
- Capillary rheology
- Notched Izod impact
- Antifog testing

## Analytical Lab

- Differential scanning calorimeter
- Thermogravimetric analyzer
- Gas chromatography
- High performance liquid chromatography
- FTIR infrared spectrometer
- Ultraviolet/visible spectroscopy
- Moisture analyzer
- Elemental nitrogen analyzer

# About Ampacet

Ampacet integrates a portfolio of masterbatches with the most advanced automated feeding, blending and color management equipment to provide sustainable solutions in rigid packaging.



**R<sup>3</sup> Sustainable Solutions** represent Ampacet's commitment to the global circular economy with a growing portfolio of innovative masterbatches benefiting customers, the industry, and the planet. With these solutions, Ampacet helps customers reduce waste and energy in manufacturing, reuse more postconsumer resins in finished products, and recycle a higher percentage of their products.

Ampacet continues to reduce the environmental impact of its global manufacturing and distribution operations. The company also works with industry partners and organizations around the world to highlight the positive impact of plastics and develop processes and systems that improve sustainability.



LIAD pioneered the single component gravimetric feeder for injection molding machines and is the leading developer of innovative feeders, blenders and real-time quality control color solutions for the plastics industry. Look for the LIAD Smart label to ensure the highest quality and accuracy.



Global Headquarters  
660 White Plains Road, Tarrytown, NY 10591-5130

Email: [loren.flaharty@ampacet.com](mailto:loren.flaharty@ampacet.com) Web: [www.ampacet.com](http://www.ampacet.com)

The information and recommendations contained in this document are based upon data collected by Ampacet. However, no warranty of fitness for use or any other guarantees or warranty of any kind, expressed or implied, is made to the information contained herein, and Ampacet assumes no responsibility for the results from the use of products and processes described herein. No liability whatsoever shall attach to Ampacet for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the applications, processing or use of the aforementioned information or products by the buyer.