



**ATLANTIS-PAK**

Leader In Innovative  
Packaging Solutions

Films **AMISTYLE**

# AMISTYLE CPP/CPE

Process Operating Manual



## 1. APPLICATION

This Process Operating Manual describes the procedure for packaging of food products in trays with the use of the **AMISTYLE CPE** and **AMISTYLE CPP** films.

**AMISTYLE CPE/CPP** are multilayer heat-shrink vapor- and gas-tight heat-sealable films made of polyamide, polyolefin, polyethylene terephthalate, EVOH and adhesive (modified polyethylene) permitted by the Russian Ministry of Health for use in the food industry. The quality of the raw materials used for production of the films is confirmed by Russian and international quality certificates.

The **AMISTYLE CPE/CPP** films are manufactured according to Specifications TU 22.21.30-052-27147091-2012 and are intended for packaging of various chilled food products (meat-based food, chilled meat, chilled poultry, sausages and specialties, chilled fish and fish-based products, cheeses and cheese-based products, cookery, etc.) by the method of vacuum thermoforming and heat shrinking in order to prolong the shelf life.

The **AMISTYLE CPE/CPP** films are suitable for processing on various types of manual, automatic and semi-automatic tray sealers.

The shelf lives of the food products packaged in the **AMISTYLE CPE/CPP** films shall be set by the manufacturers and approved following the procedure stipulated by the laws.

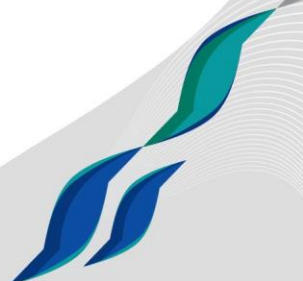
## 2. PROPERTIES AND ADVANTAGES

The combination of different polymer materials in the structure of the **AMISTYLE CPE/CPP** films provides for:

- high transparency and gloss of the film, which ensures an attractive appearance of the package;
- high barrier to gases, which preserves the MAP composition inside the package and procures for the longest storage life;
- high strength properties, which preserves the integrity of the package at the stages of transportation and storage;
- excellent sealability within a wide range of temperatures, and tight seals.

The formula of the **AMISTYLE CPE/CPP** films includes an antifogging material, which maintains the high transparency of the package at temperature fluctuations, prolongs the shelf life due to absence of any condensate at the package bottom, and preserves an esthetic appearance of the package.

The **AMISTYLE CPE/CPP** films are heat-shrinkable, which provides for uniform tension of the films over the tray.



Absence of chlorine-containing substances makes the **AMISTYLE CPE/CPP** films more environment-friendly, because disposal of such packaging is less harmful for the environment.

See the technical characteristics of the **AMISTYLE CPE/CPP** films in the Product Specifications.

### 3. ASSORTMENT

Table 1 – Assortment of the films for tray sealing

Film type	Thickness, $\mu\text{m}$	Width, mm	Standard length in reel, m
<b>AMISTYLE CPE-25</b>	25 $\pm$ 3	100 – 1400	2000
<b>AMISTYLE CPE-40</b>	40 $\pm$ 5	100 – 1300	1000
<b>AMISTYLE CPP-25</b>	25 $\pm$ 3	100 – 1400	2000
<b>AMISTYLE CPP-40</b>	40 $\pm$ 5	100 – 1300	1000

Color: clear

Marking: single-color, multi-color or CMYK printing is possible with volatile solvent-based inks.

Form of supply: reels on 76mm diameter cardboard cores.

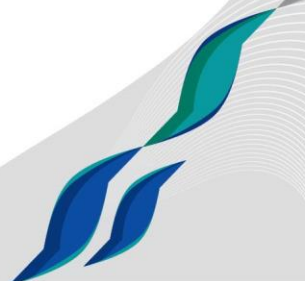
## 4. FILM PROCESSING TECHNOLOGY

### 4.1. Film storage and transportation

4.1.1. Keep the film in closed dry rooms at a distance of not less than 800mm from heaters, in the absence of strong-smelling or corrosive substances, at a temperature from + 5 °C to + 35 °C and relative humidity not exceeding 80 %.

4.1.2. Transport the film at temperatures not higher than 40 °C, and do not expose it to direct sunlight.

4.1.3. If the film was stored at a temperature below zero, keep it at room temperature before processing for at least 24 hours without opening the manufacturer's packing.



## 4.2. Food product packaging

Packaging of food products in the **AMISTYLE CPE/CPP** films shall be made in production rooms meeting the requirements of the applicable food safety regulations and standards.

The **AMISTYLE CPE** film has a heat-sealable polyethylene (PE) layer.

The **AMISTYLE CPP** film has a heat-sealable layer made of polyolefin plastomers sealable to polyethylene (PE) and polypropylene (PP).

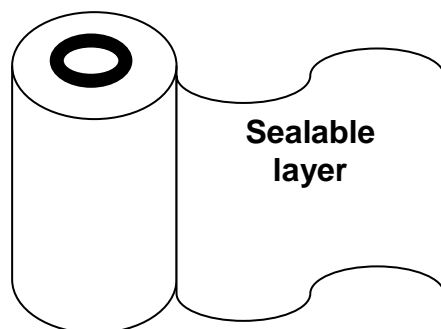


Fig. 1 – Location of the Amistyle film sealable layer

Loading of the film in the tray sealer must be made in accordance with the instructions of the equipment manufacturer and the loading procedure.

Polymer tray packaging of food products with the use of the **AMISTYLE CPE/CPP** films includes the following stages:

- placement of the product in trays. This can be done manually or automatically; take care to match the product volume with the tray size – the top of the product inside the tray must be at a lower level than the tray top;
- moving of the filled tray to the seat of the sealing unit;
- evacuation of air from the tray and pumping in of the required gas mixture. The recommended gas-to-product volume ratio is from 1:1 to 1:2. To make flat sealed containers, the gas pressure must be approximately equal to the atmospheric pressure (1,000 mbar). To make convex trays, the gas pressure must be higher than the atmospheric pressure;
- sealing of the tray lid and punching out the tray contour.

Take care to prevent the product getting into the film and tray sealing zone, because this may lead to a loss of vacuum. The product to be packaged must be free of sharp edges that may puncture the package, which will affect the product quality with time. The temperature and time parameters of sealing vary with the equipment condition and the tray types.

Take care to maintain the film well-tensioned during the operation.

The equipment settings (forming and sealing temperature, packages per minute rate, etc.) shall be selected on a case-by-case basis, since the

equipment type, its technical condition, the tray properties and the nature of the packaged product have an effect on the packaging quality.

When it is desired to produce lock-sealed packages, the film and the tray must be compatible (both must have the same sealable layer).

The **AMISTYLE CPE** film can be lock-sealed with the PE sealable layer of the tray. Under certain conditions, the **AMISTYLE CPE** film can be used to make easy-peeling trays with a PE sealable layer by adjustment of the sealing temperature and time.

The **AMISTYLE CPP** film can be sealed with the PP sealable layer of the tray, or lock-sealed with the tray PE sealable layer. Under certain conditions, the **AMISTYLE CPP** film can be used to make easy-peeling trays by adjustment of the sealing temperature and time.

Make sure that the film and the tray are compatible to achieve the desired tear-off force, by selecting the **AMISTYLE** film based on production trials.

The seals must be even and continuous, bearing a clear imprint of the sealing bar, without any signs of burn-through.

The sealing temperature for the **AMISTYLE CPP** film varies within the range of 160 – 190°C.

The sealing temperature for the **AMISTYLE CPE** film varies within the range of 130 – 170 °C, subject to good condition of the equipment.

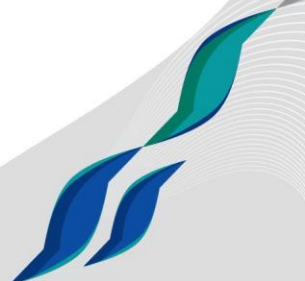
### 4.3. Transportation and storage of products

The products packaged in the **AMISTYLE CPE/ CPP** films shall be transported and stored in accordance with the standard documentation applicable to the product (GOST, TU).

## 5. MANUFACTURER'S GUARANTEES

The shelf life of the antifog component of the **AMISTYLE CPE/ CPP** films is 6 months from manufacture to processing.

The shelf life of the **AMISTYLE CPE/ CPP** film is 1 year from manufacture to processing, subject to compliance with the transportation and storage requirements for the user's warehouse, and provided that the manufacturer's packing remains intact.





PCF ATLANTIS-PAK LLC  
Address: 72 Onuchkina str., village of Lenin,  
Aksay district, Rostov region,  
346703 Russian Federation  
Phones: +7 863 255-85-85 / +7 863 261-85-80  
Fax: +7 863 261-85-79  
[www.atlantis-pak.top](http://www.atlantis-pak.top)  
[info@atlantis-pak.top](mailto:info@atlantis-pak.top)

