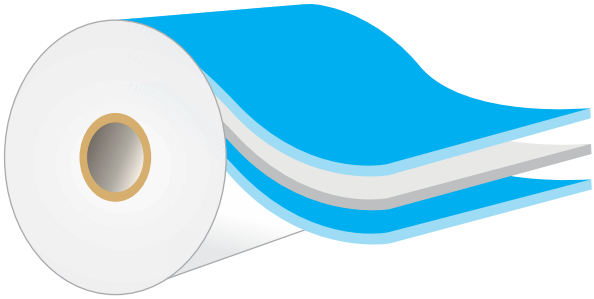
TECHNICAL DATA SHEET

TOPPAN

# 20MHS-C

BOPP FILMS

## METALLISED LOW SEAL INITIATION TEMPERATURE, HIGH HOT-TACK & HIGH SEAL STRENGTH INSIDE METALLISED HIGH BARRIER GRADE FOR HIGH SPEED PACKAGING



Metallised Layer
OPP Core
High Hot Track Low SIT Layer

**20** MICRONS

AVAILABLE CALIPERS

## DESCRIPTION

OPP MHS-C is metallised Ultra high barrier **BOPP** film. It is metallised on one side with low seal initiation temperature, high hot tack and broad seal range surface on other side; Especially designed for demanding high speed packaging applications where its wide seal operating window can be used on high speed machines. In addition to this its excellent barrier properties make it an ideal choice for sensitive product demanding great protection.

## PRODUCT FEATURES

- Wide seal operationg window with low seal initiation temperature (SIT ~ 105°C)
- Outstanding seal performance in term of strength, hot-tack and integrity
- Remarkable performance on HFFS & VFFS machines
- Excellent seal integrity in presence of contaminants and humidity
- Excellent metal adhesion, bond strength and treatment retention
- Excellent barrier properties

## APPLICATIONS

To be used as inner sealable web in laminated structure where high barrier protection and seal integrity are required

- Confectionary ( chocolate/gum/sugar)
- Bakery (Biscuits/cookie/crackers)
- Potato chips/snacks/crisp
- Household and detergents
- Ice cream and frozen food



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| | PROPERTIES | POSITION | 20MHS-C | UNIT | METHOD |
|---|---|---|---|---|---|
| GENERAL | Nominal Thickness | - | 20 | µ | Internal Method |
| | Density | - | 0.91 | g/cc | Internal Method |
| | Grammage | - | 18.2 | $g/m^2$ | Internal Method |
| | Yield | - | 54.9 | $m^2/kg$ | Internal Method |
| OPTICAL | Optical Density | - | 2.7 | - | Internal Method |
| SURFACE | Metal Adhesion | - | 100 | % | Internal Method |
| MECHANICAL | Tensile Strength (at break) | - MD<br>- TD | 1000<br>2500 | $kg/cm^2$ | ASTM D 882 |
| | Elongation (at break) | - MD<br>- TD | 210<br>70 | % | ASTM D 882 |
| | Elastic Modulus | - MD<br>- TD | 16000<br>26000 | $kg/cm^2$ | ASTM D 882 |
| THERMAL | Linear Shrinkage (max) | - MD<br>- TD | 4<br>2 | % | ASTM D 1204 |
| | Heat Seal Range | - | 105-145 | °C | Internal Method |
| | Heat Seal Strength | - | 900 | g/25mm | Internal Method (130°C/1sec/30psi) |
| BARRIER | WVTR 38° C 90% RH | - | 0.3 | $g/m^2/day$ | ASTM F 1249 |
| | OXTR 23° C | - | 40 | $cc/m^2/day$ | ASTM D 3985 |

The figures and above properties refer to typical values which are indicative only. Customers should verify the suitability of the film for its specific end use. Therefore this document will not represent a product specification.

## GUIDELINES FOR STORAGE

Temperature should preferably be less than 30°C & humidity 55±5% in storage areas and material should be consumed within three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use.

## FOOD CONTACT

OPP films complies with the requirements of FDA, EC & REACH regulations. Specific documentation is available on request

## SAFETY

Compliance with industrial health and safety standards. OPP films do not present any significant danger to health and safety in the workplace, provided they are used for the intended purpose in accordance with conventional practices and that health & safety regulations are observed. Relevant guidelines can be found in our MSDS (available upon request).

## CAUTIONS

- Film characteristics are maintained for six months from the date of invoicing except for metallized layer surface tension
- Strongly recommend online corona treatment in metallised films during lamination as treatment level decay with time is a natural phenomenon which depends on ambient conditions (Recommended storage conditions: Temperature < 30 deg C & Humidity 55% (Maximum) in original packed condition)