TECHNICAL DATA SHEET

TOPPAN

# MS225

BOPP FILMS

METALLISED HEAT SEALABLE INSIDE METALLISED HIGH BARRIER GRADE BOPP FILM WITH CONTROLLED HEAT SEAL RANGE FOR PACKAGING CONVERSION


**0.59, 0.66, 0.70, 0.78, 0.98, 1.17, 1.56** mil

AVAILABLE CALIPERS

## DESCRIPTION

OPP MS225SPL is high barrier metallised BOPP film. It is metallised on one side and heat sealable on other side having good moisture and gas barrier properties. It is lap sealable when laminated with other co-ex. Its untreated surface is specially designed for controlled heat seal range Due to its slip controlled broad seal surface this film perform well on all types of HFFS & VFFS machines.

## PRODUCT FEATURES

- Excellent metal adhesion and treatment retention
- Good sealing properties
- Excellent runability on HFFS and VFFS machines
- Good moisture and oxygen barrier
- Brilliant metal appearance
- Good stiffness and mechanical properties

## APPLICATIONS

Typically used as a inner web in laminates for VFFS & HFFS applications

- Confectionery (chocolate/gum/sugar)
- Bakery (biscuits/cookie/crackers)
- Chips and Snacks
- Dry food and powders
- Ice cream and frozen food



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| | PROPERTIES | POSITION | MS15I225-SPL | MS17I225-SPL | MS18I225-SPL | MS20I225-SPL | MS25I225-SPL | MS30I225-SPL | MS40I225-SPL | UNIT | METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GENERAL | Nominal Thickness | - | 0.59 | 0.66 | 0.70 | 0.78 | 0.98 | 1.17 | 1.56 | mil | Internal Method |
| | Density | - | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | g/cc | Internal Method |
| | Grammage | - | 2.80 | 3.17 | 3.36 | 3.73 | 4.66 | 5.60 | 7.46 | lb/1000ft$^2$ | Internal Method |
| | Yield | - | 51535 | 45418 | 42958 | 38599 | 30935 | 25732 | 19334 | in$^2$/lb | Internal Method |
| OPTICAL | Optical Density | - | | | | 2.2 | | | | - | Internal Method |
| SURFACE | Metal Adhesion | - | | | | 100 | | | | % | Internal Method |
| MECHANICAL | Tensile Strength (at break) | - MD | | | | 18486 | | | | psi | ASTM D 882 |
| | | - TD | | | | 39816 | | | | | |
| | Elongation (at break) | - MD | | | | 200 | | | | % | ASTM D 882 |
| | | - TD | | | | 60 | | | | | |
| | Elastic Modulus | - MD | | | | 255960 | | | | psi | ASTM D 882 |
| | | - TD | | | | 426600 | | | | | |
| THERMAL | Linear Shrinkage (max) | - MD | | | | 4 | | | | % | ASTM D 1204 |
| | | - TD | | | | 2 | | | | | |
| | Heat Seal Range | - | | | | 221-293 | | | | °F | Internal Method |
| | Seal Strength | - | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | lb/in | Internal Method (266°F/1sec/30psi) |
| BARRIER | WVTR 100°F 90% rh | - | | | | 0.052 | | | | g/100in$^2$/day | ASTM F 1249 |
| | OXTR 73°F 0%rh | - | | | | 6.45 | | | | cc/100in$^2$/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)



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