



PACKAGING CORPORATION

January 25, 2016

Declaration of Compliance for Food Contact Materials

We confirm that for the production of our film MQ501, the following statements apply:

1. Material description:

The film /cooking bags, designated as MQ501, is a polyester based shrink film for high temperature cooking. It is excellent for whole bird and whole muscle products. MQ501 film is used for cook-in-bags for high temperature cooking and also the PanCover line of products.

2. Intended food contact:

The film / cooking bag is designated to be used within an oven to bake whole muscle meats, e.g. chicken, at a 204°C for approximately 1 hour – 2 hours. Type of food: fatty. The film is also used in the PanCover line of products for all food types in food applications up to 204°C for up to 2 hours.

The film used to produce MQ501 is manufactured from resins that meet all the requirements of the Food and Drug Administration 21CFR 174, 21CFR 177.1630, 21CFR 177.2010, and 21CFR 177.2600 to produce articles intended for use in the processing, handling, and packaging of meat products.

3. Legal Compliance:

Europe

M&Q Packaging, Corp., use only raw materials listed in EC Directive 10/2011 We also confirm the film complies with the migration and other requirements of EC Regulation 1935/2004 and EC Commission Regulation 2023/2006.

Overall migration:

Overall migration according to Commission Regulation EU No. 10/2011 relating to plastic materials and articles intended to come in contact food. Results:

Monomers / additives having a restriction

Method Replicates	EN 1186-3 Migration into 3% acetic acid 4 hrs reflux Contact area: 1 dm ² Volume simulant: 100ml (mg/dm ²)	EN 1186-3 Migration into 10% ethanol 4 hrs reflux Contact area: 1 dm ² Volume simulant: 100ml (mg/dm ²)	EN 1186-4 Migration into Olive oil 2 hrs, 100°C Contact area: 0.95 dm ² Volume simulant: 100ml (mg/dm ²)	EN 1186-13 Migration into MPPO 2 hrs, 175°C Contact area: 1 dm ² Volume simulant: 4 gram (mg/dm ²)
1	< 0.5	0.9	< 1	< 1
2	< 0.5	< 0.5	< 1	< 1
3	< 0.5	< 0.5	< 1	< 1
4	-	-	< 1	-
Mean result	< 0.5	< 0.5	< 1	< 1

Overall migration limit is 10 mg/dm² contact area.

EARL STREET * P.O. BOX 180 * SCHUYLKILL HAVEN, PENNSYLVANIA 17972

PH: (570) 385-4991 * FAX: (570) 385-4954 * <http://www.mqplastics.com>



PACKAGING CORPORATION

Page 2

Conclusion: The overall migration results obtained from the tests on the MQ501 tube film, were found to be in compliance with the overall migration limit ($< 10\text{mg}/\text{dm}^2$) as defined in Commission Regulation (EU) No 10/2011, for all tests under the above mentioned conditions.

Specific migration:

Specific migration tests are performed according to rules as laid down in Commission Regulation (EU) No 10/2011 (and amendments) relating to plastic materials and articles intended to come in contact with food.

For determining specific migration of the components the methods as described in standard EN 13130-1 and Intertek in-house methods are used.

Simulants and test conditions are chosen based on the conditions of actual use and according to the Commission Regulation (EU) No. 10/2011 as seen below in Table 1.

Table 1

Simulant	Test Condition
10% ethanol	4 hrs @ reflux temp, by total immersion
3% acetic acid	4 hrs @ reflux temp, by total immersion
Olive Oil	2 hrs @ 100°C, single side contact by cell
MPPO *	2 hrs @ 200°C, single side contact
95% ethanol **	3.5 hrs @ 60°C, single side contact
Iso-octane**	1.5 hrs @ 60°C, single side contact

*Since the olive oil test @ 175°C cannot be performed by total immersion and single side contact testing is only possible at 100°C this simulant is included.

**Not all specific migration components can be determined in olive oil, therefore the substitute simulant is used

Table 3: Test conditions and parameters specific migration

	3% acetic acid	10% ethanol	Olive oil	MPPO	95% ethanol	Iso-octane
<i>Sample description</i>	MQ501					
<i>Test conditions</i>	4 hrs @ reflux	4 hrs @ reflux	2 hrs @ 100°C	2 hrs @ 200°C	3.5 hrs @ 60°C	1.5 hrs @ 60°C
<i>Contact area(dm²)</i>	1.0	1.0	1.9	1.0	1.9	1.9
<i>Amount simulant</i>	100 ml	100 ml	Approx 90 gram	4 gram	100ml	100 ml



PACKAGING CORPORATION

Page 3

Results below are expressed in mg/kg foodstuffs, assuming the standard EU ration of 1 kg of food coming in contact with 6 dm² of food contact material.

Component	Specific migration limit (SML) (mg/kg)	Specific migration result in 3% acetic acid (mg/kg)	Specific migration results in 10% ethanol (mg/kg)	Specific migration results in Olive oil (mg/kg)	Specific migration results in MPPO (mg/kg)
Ethylene glycol	SML (T) 30	< 15 < 15 < 15 Mean:< 15	< 12 < 12 < 12 Mean:< 12	< 25 < 25 < 25 Mean: < 25	< 1 < 1 < 1 Mean: < 1
Diethylene glycol		< 15 < 15 < 15 Mean:< 15	< 18 < 18 < 18 Mean:< 18	< 5 < 5 < 5 Mean: < 5	< 1 < 1 < 1 Mean: < 1
1, 4 – butanediol	5	<i>Exclusion based on results Overall Migration. See Overall Migration data.</i>		< 2 < 2 < 2 Mean: < 2	< 0.1 < 0.1 < 0.1 Mean: < 0.1

Note: the below components cannot be determined in olive oil; therefore the substitute simulants 95% ethanol and iso-octane were used.

Component	Specific migration limit (SML) (mg/kg)	Specific migration result in 3% acetic acid (mg/kg)	Specific migration results in 10% ethanol (mg/kg)	Specific migration results in MPPO (mg/kg)	Specific Migration results in 95% ethanol (mg/kg)	Specific Migration results in iso-octane (mg/kg)
Tetrahydrofuran	0.6	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.05 < 0.05 < 0.05 Mean:< 0.05	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.6 < 0.6 < 0.6 Mean:< 0.6
Component A	3	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.1 < 0.1 < 0.1 Mean:< 0.1	< 0.6 < 0.6 < 0.6 Mean:< 0.6	< 0.6 < 0.6 < 0.6 Mean:< 0.6

Conclusion: The specific migration results of all components obtained of the MQ501 film were found to be in compliance with the restriction for the specific migration as defined in the Commission Regulation (EU) 10/2011 for food contact materials for the tests under the above mentioned test conditions.

If there are any questions, please feel free to contact me at any time.

Sincerely,

Debra Demcher
QA Manager
M&Q Packaging, Corp.
570-385-4991
ddemcher@mqplastics.com

EARL STREET * P.O. BOX 180 * SCHUYLKILL HAVEN, PENNSYLVANIA 17972
PH: (570) 385-4991 * FAX: (570) 385-4954 * <http://www.mqplastics.com>