

Film per plastificare a caldo in poliestere PET

Film per plastificare a caldo in poliestere PET 38 micron

Description:

Gloss Polyester Polyethylene/Copolymer film, for use in encapsulation of printed materials as print finishing process. Adhesion is achieved by the reactivation of the heat sensitive resins in the Polyethylene/copolymer element.

Construction:

Base film 12 micron polyester
Adhesive 26micron EVA copolymer
Overall Tolerance: +/-5%

Physical Characteristics:

Surface Dyne level: Good
Acid resistance: Good (mild acid only)
Alkali resistance: Good
Heat resistance range: 80°C
Oil resistance: Good
Light stability: Very good protection, estimated life expectancy 25years at 500lux.
Yellowing: None
Adhesion: ≥20N
Shrinkage value: longitude direction: 1% at 150°C for 30min
Transverse direction: 0.5% at 150°C for 30min
Specific gravity range: PET/EVA : 32%/68%

Solubility in water: Insoluble

Appearance: Thin, transparent plastic film with a milky appearance

Applications: Indoor under extreme conditions. Outdoor under mild conditions.

Operating Temperature: **105°C-110°C at speed of 650mm/min**

REACTIVITY HAZARD DATA

Chemical stability: Stable.

Incompatibility: Avoid contacts with strong acids and bases.

May react violently with fluorine.

Hazardous: At temperatures above 300°C,

Decomposition: decomposition products include carbon monoxide, carbon dioxide, Products:
acetaldehyde and acrolein.

HEALTH HAZARD DATA

Effects of exposure:

Ingestion: Non-Toxic.

Skin contact: Non-Irritating.

Inhalation: Upon over-heating may product fumes. Remove Personnel to fresh air and lower heats to recommended levels.

CONTROLS AND PROTECTIVE MEASURES

Protective clothing: None required under normal conditions of use.

Gloves may be used when handling extremely hot film.

PRECAUTIONS FOR SAFE HANDLING AND USE

No special hazards anticipated under normal conditions encountered in storage, processing and disposal.

Waste disposal methods: Recycling, incineration or landfill.

	NFPA	HMIS
Health	0	0
Flammability	1	1
Reactivity	0	0
Key: 0=Minimal 1=Slight 2=Moderates 3=Serious 4=Severe		

Film per plastificare a caldo in poliestere PET 42 micron**Description:**

Gloss Polyester Polyethylene/Copolymer film, for use in encapsulation of printed materials as print finishing process. Adhesion is achieved by the reactivation of the heat sensitive resins in the Polyethylene/copolymer element.

Construction:

Base film 12 micron polyester

Adhesive 30micron EVA copolymer

Overall Tolerance: +/-5%

Physical Characteristics:

Surface Dyne level: Good

Acid resistance: Good (mild acid only)

Alkali resistance: Good

Heat resistance range: 80°C

Oil resistance: Good

Light stability: Very good protection, estimated life expectancy 25years at 500lux.

Yellowing: None

Adhesion: ≥20N

Shrinkage value: longitude direction: 1% at 150°C for 30min

Transverse direction: 0.5% at 150°C for 30min

Specific gravity range: PET/EVA : 29%/71%

Solubility in water: Insoluble

Appearance: Thin, transparent plastic film with a milky appearance

Applications: Indoor under extreme conditions. Outdoor under mild conditions.

Operating Temperature: **105°C-110°C at speed of 650mm/min**

REACTIVITY HAZARD DATA

Chemical stability: Stable.

Incompatibility: Avoid contacts with strong acids and bases.

May react violently with fluorine.

Hazardous: At temperatures above 300°C,

Decomposition: decomposition products include carbon monoxide, carbon dioxide, Products: acetaldehyde and acrolein.

HEALTH HAZARD DATA

Effects of exposure:

Ingestion: Non-Toxic.

Skin contact: Non-Irritating.

Inhalation: Upon over-heating may product fumes. Remove

Personnel to fresh air and lower heats to recommended levels.

CONTROLS AND PROTECTIVE MEASURES

Protective clothing: None required under normal conditions of use.

Gloves may be used when handling extremely hot film.

PRECAUTIONS FOR SAFE HANDLING AND USE

No special hazards anticipated under normal conditions encountered in storage, processing and disposal.

Waste disposal methods: Recycling, incineration or landfill.

	NFPA	HMIS
Health	0	0
Flammability	1	1
Reactivity	0	0
Key: 0=Minimal 1=Slight 2=Moderates 3=Serious 4=Severe		

Film per plastificare a caldo in poliestere PET 75 micron

Description:

Gloss Polyester Polyethylene/Copolymer film, for use in encapsulation of printed materials as print finishing process. Adhesion is achieved by the reactivation of the heat sensitive resins in the Polyethylene/copolymer element.

Construction:

Base film 38 micron polyester

Adhesive 12micron PE Polyethylene+25micron EVA copolymer

Overall Tolerance: +/-5%

Physical Characteristics:

Surface Dyne level: Good

Acid resistance: Good (mild acid only)

Alkali resistance: Good

Heat resistance range: 80°C

Oil resistance: Good

Light stability: Very good protection, estimated life expectancy 25years at 500lux.

Yellowing: None

Adhesion: ≥20N

Shrinkage value: longitude direction: 1% at 150°C for 30min

Transverse direction: 0.5% at 150°C for 30min

Specific gravity range: PET/PE/EVA : 51%/16%/33%

Solubility in water: Insoluble

Appearance: Thin, transparent plastic film with a milky appearance

Applications: Indoor under extreme conditions. Outdoor under mild conditions.

Operating Temperature: **120°C-125°C at speed of 650mm/min**

REACTIVITY HAZARD DATA

Chemical stability: Stable.

Incompatibility: Avoid contacts with strong acids and bases.

May react violently with fluorine.

Hazardous: At temperatures above 300°C,

Decomposition: decomposition products include carbon monoxide, carbon dioxide, Products: acetaldehyde and acrolein.

HEALTH HAZARD DATA

Effects of exposure:

Ingestion: Non-Toxic.

Skin contact: Non-Irritating.

Inhalation: Upon over-heating may product fumes. Remove

Personnel to fresh air and lower heats to recommended levels.

CONTROLS AND PROTECTIVE MEASURES

Protective clothing: None required under normal conditions of use.

Gloves may be used when handling extremely hot film.

PRECAUTIONS FOR SAFE HANDLING AND USE

No special hazards anticipated under normal conditions encountered in storage, processing and disposal.

Waste disposal methods: Recycling, incineration or landfill.

	NFPA	HMIS
Health	0	0
Flammability	1	1
Reactivity	0	0
Key: 0=Minimal 1=Slight 2=Moderates 3=Serious 4=Severe		



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Rev. 00
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Client: HUIZHOU YIDU STATIONERY SUPPLIES CO., LTD
NO. 19 HUITAI ROAD, HUITAI INDUSTRIAL PARK, HUIZHOU CITY,
GUANGDONG, CHINA

Test Description: The submitted sample was identified and described by client as:
护卡膜 laminating film / laminating pouches (PET/EVA or PET/PE/EVA)

Test Specification: **To test for compliance with 2002/95/EC – Restriction of Hazardous Substances (RoHS)**

(1) Heavy Metals (Lead, Cadmium, Hexavalent Chromium and Mercury) Tests

(2) Brominated Flame Retardants (PBBs & PBDEs) Tests

Test Method: Please refer to next page(s)

Test Result: Please refer to next page(s)

Conclusion: The submitted sample was evaluated in accordance with the following directive(s). The verdict(s) was/were drawn as follow:

2002/95/EC & 2005/618/EC – Restriction of Hazardous Substances (RoHS) - Heavy Metals Test **PASS**

2002/95/EC & 2005/618/EC – Restriction of Hazardous Substances (RoHS) - Polybrominated Biphenyls & Polybrominated Biphenyl Ethers (PBB & PBDE) Tests **PASS**



1 Description of the test subject

Sample No.	Color and description	Photograph
001	Translucent soft plastic film	

2 Order

2.1 Date of Purchase Order

2010-03-23

2.2 Receipt of Test Sample, Location

2010-03-24, Guangzhou

2.3 Date of Testing

2010-03-24 to 2010-03-29

2.4 Location of Testing

The test was performed in an accredited laboratory and the test results were reviewed at Jiangsu TÜV Product Service Ltd. Guangzhou Branch.



3 Test Results

3.1 Test for Heavy Metals

– Lead, Cadmium, Hexavalent Chromium and Mercury Tests according to IEC 62321:2008.

Element	Total Lead [mg/kg]	Total Cadmium [mg/kg]	Hexavalent Chromium [mg/kg]	Total Mercury [mg/kg]
Detection Limit	10	5	5	10
RoHS Requirements	1000	100	1000	1000
Sample 001	N.D.	N.D.	N.D.	N.D.

Note:

1. All Concentrations express in "mg/kg"(milligram per kilogram),mg/kg ~ ppm
2. "N.D." = "Not Detected"



3.2 Test for Flame retardants

– Brominated Flame Retardants (PBB& PBDE) according to IEC 62321:2008 and Quantification with GC-MS.

PBBs [mg/kg]	Sample 001
Monobromobiphenyl	N.D.
Dibromobiphenyl	N.D.
Tribromobiphenyl	N.D.
Tetrabromobiphenyl	N.D.
Pentabromobiphenyl	N.D.
Hexabromobiphenyl	N.D.
Heptabromobiphenyl	N.D.
Octabromobiphenyl	N.D.
Nonabromobiphenyl	N.D.
Decabromobiphenyl	N.D.
Sum of PBBs	N.D.
Limit < 1000 mg/kg	
PBDEs [mg/kg]	
Monobromodiphenyl Ether	N.D.
Dibromodiphenyl Ether	N.D.
Tribromodiphenyl Ether	N.D.
Tetrabromodiphenyl Ether	N.D.
Pentabromodiphenyl Ether	N.D.
Hexabromodiphenyl Ether	N.D.
Heptabromodiphenyl Ether	N.D.
Octabromodiphenyl Ether	N.D.
Nonabromodiphenyl Ether	N.D.
Decabromodiphenyl Ether	N.D.
Sum of PBDEs ***	N.D.
Limit < 1000 mg/kg	

Note:

1. All Concentrations express in "mg/kg" (milligram per kilogram), mg/kg ~ ppm
2. "N.D." = "Not Detected", Detection Limit =5 mg/kg
3. *** means the exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 2008-04-01. Subsequently DecaBDE should be included in the sum of PBDE since 2008-07-01.



4 Remark

N/A



5 Documentation



N/A

6 Summary

The test specification is met.

Jiangsu TÜV Product Service Ltd. Guangzhou Branch
TÜV SÜD Group

Engineer:  
Leon Tao

Technical Report checked:  
Winny Wu