ADHESION WITH PURPOSE

Enabling Sustainable Packaging with Water-based Primers and Coatings

www.mica-corp.com

Solving the Industry's Toughest Adhesion Challenges Since 1971

Water-based primers and coatings for adhesion and beyond.

We are committed to quality and customer service.

We are enabling a sustainable future for packaging with innovation and expertise.

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Product Portfolio Summary

Mica's water-based product portfolio is comprised of 5 major categories.

Barrier Coatings

MICA Barrier Coatings are designed to meet your specific performance needs for oxygen barrier and oil and grease resistance.

Extrusion Coating & Extrusion Lamination Primers

MICA Extrusion Primers are designed to meet a large variety of demands for paper, thin-film, foil, polywovens, SiO_x and AlO_x biodegradable, compostable, reusable, and recyclable structures.

Heat Seal Coatings

MICA Heat Seal Coatings offer varying peel strengths and sealing characteristics for a range of direct and indirect food packaging applications.

Specialty Primers

MICA Specialty Primers are used to improve adhesion of metal layers deposited on a variety of substrates.

OPV

MICA OPV provides matte, and gloss finishes to the films, which can not only be used over the print, but also on unprinted side.

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Product Portfolio

MICA Primer & Coating Portfolio

Extrusion Coating & Extrusion Lamination Primers

MICA	Solids (%)	pH (25°C)	Bond (gf/inch)	Visc. (cp)	Shelf Life	FDA HALAL	Adhesion Improvement
A-131-X	4.7	10.7	200-880	<25	18	Yes/Yes	Clear & Printed film//PE, Copolymer, Ionomer
H-760-A	11.5	9.0	240-1000	<50	18	Yes/Yes	Clear & Printed Film, Paper//PE, Copolymer, Ionomer, Biodegradable
H-788	21	10-11	105-530	<100	18	Yes/Yes	Outside of Paper Cups
A-251-A	20	10	107-1000	<50	18	Yes/No	Metallized Film, Aluminum Foil //PE
M-1164	10	11	160-1000	<100	12	Yes/Yes	Aluminum Foil//PE, Copolymer, Ionomer, ink
G-1092	5	10	120-2650	<100	12	Yes/No	Metallized Film, Aluminum Foil, AlO_x//PE, Copolymer, Ionomer
R-1595	5	11	140-1180	<100	18	Yes/No	Clear & Printed Film// Copolymer (low process temperature)
R-1509-C	50	5	120-320	<800	12	Yes/No	Paper//PHA, Polyester
M-2420	4	11	220-1085	<100	12	Yes/Yes	Clear & Printed Film// Copolymer (Polaroid test, Retort)
R-1207	8	11	80-880	<100	12	Yes/No	Paper//PP
G-782	5	9	430-900	<100	12	Yes/No	SiO_2, AlO_x//PE, Copolymer, Ionomer

Compostable

MC-634	30	5.5	650-800	<355	12	Yes/Yes	Paper//PLA
EL-1473	40	8.5	200-550	<200	6	Yes/No	Paper//PHA, PBS

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Product Portfolio

MICA Primer & Coating Portfolio

Specialty Primers

MICA	Solids (%)	pH (25°C)	Bond (gf/inch)	Visc. (cp)	Shelf Life	FDA/ HALAL	Adhesion Improvement
Metallization Primer							
EL-1277	40	8	100	<200	12	Yes/No	Clear Film//Metal
Digital Printing Primer							
YZ-1112	12	9		<150	18	Yes/Yes	Clear Film, paper//digital print

Barrier Coatings

MICA	Solid (%)	pH (25°C)	Barrier (cc/m2/day)	Visc. (cp)	Shelf Life	FDA HALAL	Oxygen Barrier Improvement
Oxygen Barrier							
EL-1241	10	11.5	0.6-1	<100	9	Yes/Yes	Mono-material films, PET, Metallized film//adhesive/sealant
EL-1241-HS	13	11.5	0.6-1	<400	9	Yes/Yes	Mono-material films, PET, Metallized film//adhesive/sealant
OGR							
EL-1808	40	8.5	Kit=10, Cobb=33	<2000	6	TBD	Paper, Paper Board

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Product Portfolio

MICA Primer & Coating Portfolio

Heat Seal Coatings

MICA	Solids (%)	pH (25°C)	Seal (gf/15 mm)	SIT (°C)	Visc. (cp)	Shelf Life	FDA/ HALAL	Application
HME-118-C	40	7	250-350	60	<400	12	Yes/Yes	Film, paper
M-2824	45	8	350-500	116	<100	9	Yes/No	Paper

Repulpable

EL-1813	35	8	700	93	<200	12	Review	Paper (Cobb =2 on 18 pt paper board)
G-680	20	10	100-270	85	<50	18	Yes/No	Paper

Compostable

EL-1808	40	8.5	240-370	48	<2000	6	Review	Paper

OPV

MICA	Solids (%)	pH (25°C)	Heat Resistance	Gloss (60°)	Visc. (cp)	Shelf Life	FDA/ HALAL	Application
LV-253	38.6	8.6	>500°F	<10	650	TBD	TBD	Clear film

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Packaging Structure Examples

Clear & Printed films

OPET/Ink/**Primer**/$LDPE_x$/LLDPE or Sealant

OPP/Ink/**Primer**/ $LDPE_x$/LLDPE or Sealant

OPP/Ink/**Primer**/PP_x

Polywoven Bags

OPP/Ink/**Primer**/$(LDPE+PP+Tie)_x$/PP woven

Paper & Biodegradable

Primer/Cup Board/$LDPE_x$ or PLAx

Ink/Paper/Met/**Primer**/$PVOH_x$/Tie/Sealant

Ink/Paper/**Primer**/PHA_x or PBS

Ink/Paper/$Starch_x$/**Primer**/Films

Foil and Metallized Films

OPET/Ink/**primer**/$LDPE_x$/Alu. Foil/**Primer**/EVA_x or $Ionomer_x$

OPET/Met/**Primer**/PP_x

OPP/ink/adhesive/Met/OPET/**Primer**/$LDPE_x$/LLDPE

AlO_x , SiO_x Coated Films

OPE/AlO_x/**Primer**/$LDPE_x$

OPET/SIO_x/**Primer**/$LDPE_x$

Metallization

Film/**Primer**/V.M.

Barrier, Heat Seal, Varnish

OPE/Ink/**Barrier**/Adhesive/LLDPE or Sealant

Print/Paper/**Heat Seal**

PET/**Varnish**

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LET'S CREATE A SUSTAINABLE FUTURE FOR PACKAGING TOGETHER

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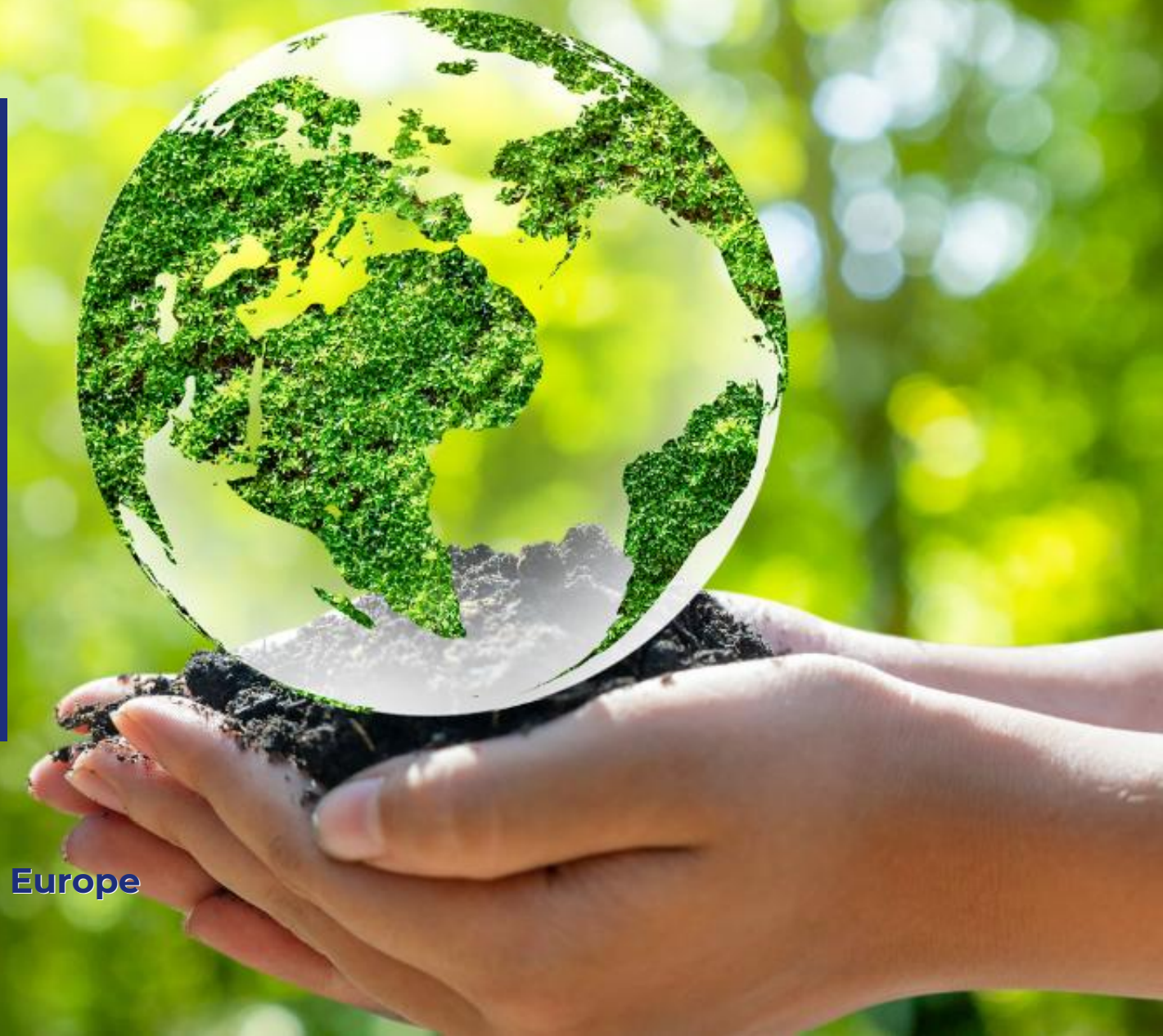

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