PRODUCT DATA SHEET

ECOMET TOP BROWN

These Organic topcoats can be applied over Zinc plating and Zinc/Aluminum flake-based Basecoats. Application techniques can be used as Dip-Spin for mass produced small hardware's, Screws and Conventional spray for larger parts.

PHYSICAL PROPERTIES	Units	
Colour		Brown
Theoretical coverage	m2/kg/10 µ	15 - 20
Viscosity (Zhan Cup 2)	Seconds	35 - 45
Solids (By Weight)	%	38 ± 3
Density	Gms/cc	1.10 +/- 0.1
Flash point	ºC	>100
COF Values ISO 16047	µtot	0.12 - 0.18
Chrome Content		N.A.

APPLICATION

Substrate	Any metal substrate except high copper containing alloys.
Surface preparation	The substrate must be dry and free from dust and grease. Acidic/ basic impurities and particularly salts must be avoided.
Possible Pre-treatment / Basecoat	Zinc/Al flake-based Basecoats, Electroplating etc.
Application Method	Dip / Spin, Dip, Spray etc.
Filtration	150 mesh stainless steel Sieve
Application viscosity	25 - 30 sec. on Zhan cup 2 for Dip-spin & 18 - 20 for Spray application.
Recommended DFT	8-12 µ
Addition	DM Water
Addition of DM Water	5 - 10 % by weight
Flash Off	5-10 min. at 100-120°C.
Curing (metal temp.)	25 - 30 min. at 200 - 220 °C

- Physical constants are averages and are not to be used as product specifications. They may vary up to 5 % of the values shown are - specifications representative for the process capability.
- Storage life is 12 months at 20-25°C. For more information on health & safety refer Material safety data sheet for handling and applying

SUMMMARY

ECOMET TOP BROWN
Coating Test

Recommended Base Coat:

- Acid Zinc Plating
- Alkaline Zinc Plating
- ECOMET Corundum
- ECOMET 500

PHYSICAL TESTS OF LIQUID PAINT

#	Name of test	Procedure	Results	Comment
1.	Viscosity	By Zhan Cup no 2	35 - 45 seconds	
2.	Solid Content	By weight	38 % +/- 3	
3.	pH	pH meter	8 - 9	

AFTER APPLICATION ON SUBSTRATE: PHYSICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Coating Layer Thickness		6 - 8 Micron	By Thickness gauge
2.	Adhesion	ISO-10683	Pass	7Nm/12mm2
3.	Hardness of Film	Pencil Test	> 4 H	

AFTER APPLICATION ON SUBSTRATE: CHEMICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Automotive Oil and Fuel Tests	Dip	Pass	
2.	Acid test – 2PH	Dip	Pass (30 Seconds)	

AFTER APPLICATION ON SUBSTRATE: PERFORMANCE TESTS

#	Name of Test	Procedure	Results	Comment
1.	SST	ASTM B117	500 Hours	Additional to basecoat
2.	COF Test	ISO16047	0.15 +/- 0.03 tot	Others on request

PRODUCT DATA SHEET

ECOMET TOP COPPER

These Organic topcoats can be applied over Zinc plating and Zinc/Aluminium flake-based Basecoats. Application techniques can be used as Dip-Spin for mass produced small hardware's, Screws and Conventional spray for larger parts.

PHYSICAL PROPERTIES	Units	
Colour		Copper
Theoretical coverage	m2/kg/10 µ	15 - 20
Viscosity (Zhan Cup 2)	Seconds	40 - 50
Solids (By Weight)	%	40 ± 3
Density	Gms/cc	1.10 +/- 0.1
Flash point	ºC	>100
COF Values ISO 16047	µtot	0.12 - 0.18
Chrome Content		N.A.

APPLICATION

Substrate	Any metal substrate except high copper containing alloys.
Surface preparation	The substrate must be dry and free from dust and grease. Acidic/ basic impurities and particularly salts must be avoided.
Possible Pre-treatment / Basecoat	Zinc/Al flake-based Basecoats, Electroplating etc.
Application Method	Dip / Spin, Dip, Spray etc.
Filtration	150 mesh stainless steel Sieve
Application viscosity	25 - 30 sec. on Zhan cup 2 for Dip-spin & 18 - 20 for Spray application.
Recommended DFT	8-12 µ
Addition	DM Water
Addition of DM Water	5 - 10 % by weight
Flash Off	5-10 min. at 100-120°C.
Curing (metal temp.)	25 - 30 min. at 200 - 220 °C .

- Physical constants are averages and are not to be used as product specifications. They may vary up to 5 % of the values shown are specifications representative for the process capability.
- Storage life is 12 months at 20-25°C. For more information on health & safety refer Material safety data sheet for handling and applying.

SUMMMARY

ECOMET TOP COPPER
Coating Test

Recommended Base Coat:

- Acid Zinc Plating
- Alkaline Zinc Plating
- ECOMET Corundum
- ECOMET 500

PHYSICAL TESTS OF LIQUID PAINT

#	Name of test	Procedure	Results	Comment
1.	Viscosity	By zhan cup no 2	40 - 50 seconds	
2.	Solid Content	By weight	40 +/- 3 %	
3.	pH	pH meter	8 - 9	

AFTER APPLICATION ON SUBSTRATE: PHYSICAL TESTS

#	Name of test	Procedure	Results	Comment
1.	Coating Layer Thickness		6 - 8 Micron	By Thickness gauge
2.	Adhesion	ISO-10683	Pass	7Nm/12mm2
3.	Hardness of Film	Pencil Test	> 4 H	

AFTER APPLICATION ON SUBSTRATE: CHEMICAL TESTS

#	Name of test	Procedure	Results	Comment
1.	Automotive Oil and Fuel Tests	Dip	Pass	

AFTER APPLICATION ON SUBSTRATE: PERFORMANCE TESTS

#	Name of test	Procedure	Results	Comment
1.	SST	ASTM B117	500 Hours	Additional to base coat
2.	COF Test	ISO16047	0.15 +/- 0.03 tot	Others on request

PRODUCT DATA SHEET

ECOMET TOP GREEN

These Organic topcoats can be applied over Zinc plating and Zinc/Aluminium flake-based Basecoats. Application techniques can be used as Dip-Spin for mass produced small hardware's, Screws and Conventional spray for larger parts.

PHYSICAL PROPERTIES	Units	
Colour		Green
Theoretical coverage	m2/kg/10 µ	15 - 20
Viscosity (Zhan Cup 2)	Seconds	40 - 50
Solids (By Weight)	%	33 ± 3
Density	Gms/cc	1.10 +/- 0.1
Flash point	ºC	>100
COF Values ISO 16047	µtot	0.12 - 0.18
Chrome Content		N.A.

APPLICATION

Substrate	Any metal substrate except high copper containing alloys.
Surface preparation	The substrate must be dry and free from dust and grease. Acidic/ basic impurities and particularly salts must be avoided.
Possible Pre-treatment / Basecoat	Zinc/Al flake-based Basecoats, Electroplating etc.
Application Method	Dip / Spin, Dip, Spray etc.
Filtration	150 mesh stainless steel sieve
Application viscosity	25 - 30 sec. on Zhan cup 2 for Dip-spin & 18 - 20 for Spray application.
Recommended DFT	8-12 µ
Addition	DM Water
Addition of DM Water	5 - 10 % by weight
Flash Off	5-10 min. at 100-120°C.
Curing (metal temp.)	25 - 30 min. at 200 - 220 °C

- Physical constants are averages and are not to be used as product specifications. They may vary up to 5 % of the values shown are specifications representative for the process capability.

-Storage life is 12 months at 20-25°C. For more information on health & safety refer Material safety data sheet for handling and applying

SUMMMARY

ECOMET TOP GREEN

Coating Test

Recommended Base Coat:

- Acid Zinc Plating
- Alkaline Zinc Plating
- ECOMET Corundum
- ECOMET 500

PHYSICAL TESTS OF LIQUID PAINT

#	Name of Test	Procedure	Results	Comment
1.	Viscosity	By Zhan Cup no. 2	40 - 50 seconds	
2.	Solid Content	By weight	33 % +/- 3	
3.	pH	pH meter	8 - 9	

AFTER APPLICATION ON SUBSTRATE: PHYSICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Coating Layer Thickness		6 - 8 Micron	By Thickness gauge
2.	Adhesion	ISO-10683	Pass	7Nm/12mm2
3.	Hardness of Film	Pencil Test	> 4 H	

AFTER APPLICATION ON SUBSTRATE: CHEMICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Automotive Oil and Fuel Tests	Dip	Pass	
2.	Acid test – 2PH	Dip	Pass (30 Seconds)	

AFTER APPLICATION ON SUBSTRATE: PERFORMANCE TESTS

#	Name of Test	Procedure	Results	Comment
1.	SST	ASTM B117	500 Hours	Additional to Basecoat
2.	COF Test	ISO16047	0.15 +/- 0.03 tot	Others on request

PRODUCT DATA SHEET

ECOMET TOP SILVER

These Organic topcoats can be applied over Zinc plating and Zinc/Aluminium flake-based Basecoats. Application techniques can be used as Dip-Spin for mass produced small hardware's and Conventional spray for larger parts.

PHYSICAL PROPERTIES	Units	
Colour		Silver Grey
Theoretical coverage	m2/kg/10 µ	15-20
Viscosity (Zhan Cup 2)	Seconds	35-45
Solids (By Weight)	%	35 ± 2
Density	Gms/cc	1.10 +/- 0.1
Flash point	ºC	>100
COF Values ISO 16047	µtot	0.12 - 0.18

APPLICATION

Substrate	Any metal substrate except high copper containing alloys.
Surface preparation	The substrate must be dry and free from dust and grease. Acidic/ basic impurities and particularly salts must be avoided.
Possible Pre-treatment	Zinc/Al flake-based Basecoats, Electroplating etc.
Application Method	Dip / Spin, Dip, Spray etc.
Filtration	150 mesh stainless steel Sieve
Application viscosity	25 – 30 sec. on Zhan cup 2 for Dip-spin & 18 – 20 for Spray application.
Recommended DFT	8-12 µ
Addition	DM Water
Addition of DM Water	5 - 10 % by weight
Flash Off	5-10 min. at 100-120°C.
Curing (metal temp.)	15 **-** 30 min. at 200 - 220 °C.

- Physical constants are averages and are not to be used as product specifications. They may vary up to 5 % of the values shown are specifications representative for the process capability.
- Storage life is 12 months at 20-25°C
- For more information on health & safety refer Material safety data sheet for handling and applying.

SUMMMARY

ECOMET TOP SILVER

Coating Test

Recommended Base Coat:

- Acid Zinc Plating
- Alkaline Zinc Plating
- ECOMET Corundum
- ECOMET 500

PHYSICAL TESTS OF LIQUID PAINT

#	Name of Test	Procedure	Results	Comment
1.	Viscosity	By zhan cup no 2	35-45 seconds	
2.	Solid Content	By weight	35 +/- 2%	
3.	pH	pH meter	8-9	

AFTER APPLICATION ON SUBSTRATE: PHYSICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Coating Layer Thickness		4-6 Micron	By Thickness gauge
2.	Adhesion	ISO-10683	Pass	7Nm/12mm2
3.	Hardness of Film	Pencil Test	>4 H	

AFTER APPLICATION ON SUBSTRATE: CHEMICAL TESTS

#	Name of Test	Procedure	Results	Comment
1.	Automotive Oil and Fuel Tests	Dip	Pass	
2.	Acid test – 2PH	Dip	Passes (30 Seconds)	

AFTER APPLICATION ON SUBSTRATE: PERFORMANCE TESTS

#	Name of Test	Procedure	Results	Comment
1.	SST	ASTM B117	500 Hours	Additional to base coat
2.	COF Test	ISO16047	0.15 +/- 0.03 tot	Others on request