

تاریخ: ۱۴۰۴/۱۱/۰۵

شماره: ۱۴۰۴۱۱-۰۸۲۰۴

پیوست: ۱۲ برگ

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مدیریت محترم عامل شرکت پارس اشن

موضوع: گزارش آزمون (بخش دوم-نهایی)

با درود و سلام

احتراما، بازگشت به نامه آن شرکت محترم به شماره ۱۴۰۴/م/۰۲-۵۳ مورخ ۱۴۰۴/۰۲/۲۸، بخش دوم گزارش آزمون‌های درخواستی مربوط به پوشش کولتار اپوکسی بر اساس استاندارد (1) IPS-M-TP-207 ویرایش 2023 (معادل INSO 23294 ویرایش 1401) در دوازده برگ پیوست حضورتان اعلام می‌گردد. قابل ذکر است، از آنجا که نمونه برداری توسط بازرس مترا صورت نگرفته است، لذا نتایج پیوست تنها در خصوص نمونه ارسالی معتبر بوده و قابل تعمیم به کل محموله نمی‌باشد.

\*توضیح ۱: بخش اول گزارش آزمون مربوط به پوشش کولتار اپوکسی طی نامه به شماره ۱۴۰۴۱۰-۰۷۹۹۳ مورخ ۱۴۰۴/۱۰/۲۸ ارسال گردید.

اقدام‌کننده: آزمایشگاه / HKF

با احترام  
مدیر عامل  
علی بزرگی

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Miscibility	
Customer Name	شرکت پارس اشن
Material Manufacturer / Name & Code*	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
Test Date	1404/08/10
Test Method	Observative
Lab. Conditions	Temp.: 23±2(°C), R.H: 35±5(%)
Number of Runs	2
Results	
Observation	without any change in solution clarity and other defects has not been observed
Acceptance Criteria <sup>(3)</sup>	<b>without any change in solution clarity and other defects has not been observed</b>
Final Conclusion	<b>Pass</b>
(1): Material Manufacturer, Name & Code is reported based on customer documents.	

**Solid Content (by Weight)**

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/11/05
<b>Test Method</b>	IPS-M-TP-207 (1)
	ASTM D2369
<b>Test Device &amp; Code</b>	Balance / 1506
	Oven / 5161
<b>Lab. Conditions</b>	Temp.: 23±2(°C), R.H : 35±5(%)
<b>Number of Runs</b>	2
<b>Results</b>	
<b>Solids Content (%)</b>	81.75
(1): Material Manufacturer, Name & Code is reported based on customer documents.	

### Density

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/11/05
<b>Test Method</b>	ASTM D1475
<b>Test Device &amp; Code</b>	Balance / 1506
	Pycnometer / 1961
<b>Lab. Condition</b>	Temp.: 23±2(°C), R.H : 35±5(%)
<b>Number of Runs</b>	2
Results	
<b>Density (gr/cm<sup>3</sup>)</b>	2.32
.(1): Material Manufacturer, Name & Code is reported based on customer documents	

**Pigment Content (Zinc Dust Percentage)**

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/11/02
<b>Test Method</b>	ASTM D2371 & XRF & XRD
<b>Test Device &amp; Code</b>	Centrifuge / 1727
	Oven / 1508
	Balance / 1506
	XRF & XRD
<b>Lab. Conditions</b>	Temp.: 23±2(°C), R.H: 35±5(%)
<b>Number of Runs</b>	2
<b>Results</b>	
<b>Total Zinc Dust in Dry Film (%wt)</b>	85
(1): Material Manufacturer, Name & Code is reported based on customer documents.	

Pot Life	
Customer Name	شرکت پارس اشن
Material Manufacturer / Name & Code*	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
Test Date	1404/08/10
Test Method	ISO 9514
Lab. Conditions	Temp.: 23±2(°C), R.H : 35±5(%)
Number of Runs	2
Results	
Pot Life (hrs)	~6
(1): Material Manufacturer, Name & Code is reported based on customer documents.	

Flash Point	
Customer Name	شرکت پارس اشن
Material Manufacturer / Name & Code*	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
Test Date	1404/08/10
Test Method	IPS-M-TP-207 (1)
	ASTM D56
Test Device & Code	Abel Closed Cup / 1574
Specimen size (ml)	70
Lab. Conditions	Temp.: 23±2(°C), R.H : 35±5(%)
Number of Runs	2
Results	
Flash Point (°C)	25
(1): Material Manufacturer, Name, Code & Batch No. is reported based on customer documents.	

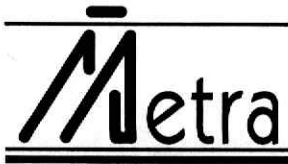
### Working Properties

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/08/27
<b>Test Method</b>	Observative
<b>Lab. Conditions</b>	Temp.: 23±2(°C), R.H : 35±5(%)
<b>Number of Runs</b>	2
<b>Results</b>	
<b>Observation</b>	Uniform film (Without any defects Such as Sagging, Running & ...)
<small>(1): Material Manufacturer, Name &amp; Code is reported based on customer documents.</small>	

Dry Film Appearance	
Customer Name	شرکت پارس اشن
Material Manufacturer / Name & Code*	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
Test Date	1404/08/27
Test Method	Observative
Specimen <sup>(1)</sup>	Sand Blasted Steel Panel: (150*75*2) mm
Lab. Conditions	Temp.: 23±2(°C), R.H: 35±5(%)
Number of Runs	2
Results	
Observation	Uniform film Without Crack & Other Defects
(1): Specimen Preparation was done by Metra according to customer document.	

### Mud Cracking

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/08/27
<b>Test Method</b>	IPS-M-TP-207 (1)
<b>Specimen<sup>(1)</sup></b>	Sand Blasted Steel Panel: (150*75*2)mm
	Nominal Dry Film Thickness ( $\mu\text{m}$ ) : 120-150
<b>Test Device &amp; Code</b>	Magnifier (10 X) / 1688
<b>Number of Runs</b>	2
<b>Results</b>	
<b>Observation</b>	Without any Crack
<p>(1): Material Manufacturer, Name &amp; Code is reported based on customer documents.                  (2): Specimen preparation was done by Metra lab according to customer documents.</p>	



کاربرگ گزارش آزمون

**Adhesion (Cross-Cut)**

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/09/01
<b>Test Method</b>	ASTM D3359
<b>Test Device &amp; Code</b>	Cross - Hatch (2 mm) / 1585
<b>Specimen<sup>(1)</sup></b>	Blasted Steel Panel: (150*75*2) mm
<b>DFT (µm)</b>	75-85
<b>Lab. Conditions</b>	Temp.: 23±2(°C), R.H : 35±5(%)
<b>Number of Runs</b>	2
<b>Results</b>	
<b>Adhesion Rating</b>	5B
<small>(1): Material Manufacturer, Name &amp; Code is reported based on customer documents.</small>	
<small>(2): Specimen preparation was done by Metra lab according to customer documents.</small>	



\*این گزارش بدون مهر فاقد اعتبار می باشد.

Reference No.: LS-140400137-2

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### Salt Fog Resistance

<b>Customer Name</b>	شرکت پارس اشن
<b>Material Manufacturer / Name &amp; Code*</b>	PARS ESHEN Co.
	Zinc Ethyl Silicate Primer
<b>Test Date</b>	1404/09/04
<b>Test Method</b>	IPS-M-TP-207 (1)
	ASTM B117
<b>Test Device &amp; Code</b>	Digital Salt Spray / 1525
<b>Chamber Temperature (°C)</b>	35
<b>Volume of Salt Solution (ml/hr.8 cm<sup>2</sup>)</b>	1-2
<b>Specific Gravity of Salt Solution (gr/ cm<sup>2</sup>)</b>	1.03
<b>pH of Collected Salt Solution</b>	7
<b>Exposure Period (hrs)</b>	1000
<b>Test Date Completion</b>	1404/10/16
<b>Specimen<sup>(2)</sup></b>	Sand Blasted Steel Panel: (150*75*2)mm
	Nominal Dry Film Thickness (µm) : 75-85
	V-Cut: (Length:4Cm , Position: Center of specimen)
	Specimen Back and cutting edges Sealing
<b>Lab. Conditions</b>	Temp.: 23±2(°C), R.H: 35±5(%)
<b>Number of runs</b>	2
Results	
<b>Degree of Rusting (ASTM D610)</b>	10 (No Rusting)
<b>Degree of Blistering (ASTM D714)</b>	10 (No Blistering)
<b>Rating of Failure at Scribe (ASTM D1654, Method A)</b>	Rating No. 10
<b>Formation of Under-Film Corrosion (ASTM D1654, Method B)</b>	10 (No Rusting)
(1): Material Manufacturer, Name & Code is reported based on customer documents.	
(2): Specimen Preparation was done by Metra according to customer documents.	