



**THE NATIONAL ACADEMY OF SCIENCES OF UKRAINE - EUROPE
KARPENKO INSTITUTE OF PHYSICS AND MECHANICAL ENGINEERING**

Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11



THERMAL INSULATING COATING SYSTEMS

TESTING PROGRAM 2021



THE NATIONAL ACADEMY OF SCIENCES OF UKRAINE - EUROPE
KARPENKO INSTITUTE OF PHYSICS AND MECHANICAL ENGINEERING

Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory № 11

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LABORATORY PURPOSE:

- Certification of materials and coatings, development of new insulation materials; Development of methods for predicting life time and accelerated assessment of protective properties of coatings, development of regulatory documentation in this field.

THE MAIN ACTIVITIES OF THE LABORATORY:

- Certification tests of domestic and imported film, polymer, paint, mastic, anti-corrosion coatings and thermal insulation materials used in the national economy to protect against corrosion;
- Experimenting with new materials and designs of coatings;
- Consulting, examination of Standards and technical documentation, issuance of conclusions on the use of materials;
- Participation in carrying out technical supervision of production of materials, control and acceptance tests of coverings on objects;
- Development and approval of technical conditions and standards for materials;
- Development of methods of materials testing, transfer to customers of copies of methods, technical conditions, standards and other normative documents developed by the laboratory for heat-insulating and anti-corrosion materials;
- Research of physical-mechanical and protective properties of materials, participation in development of new anticorrosive materials and coverings.

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PUBLICATIONS

1. Anticorrosive material based on fast-hardening bitumen-latex emulsion, Application 2013 a 201312497, Conclusion on compliance of the invention with the conditions of patentability according to the results of the qualification examination of April 30, 2015.
2. VA Chervatyuk, IM Kushnir Protective properties of coating systems based on fast-setting bitumen-latex emulsions for corrosion protection of pipelines and objects of oil and gas complex (Physico-chemical mechanics of materials. Problems of corrosion and corrosion protection of materials. Special issue № 10, 2014, Volume 1, pp.245-249)
3. VA Chervatyuk, IM Kushnir Anticorrosion Coatings based on a Water-Bitumen-Polymeric Composite with High Rates of Formation (Materials Science November 2013, Volume 49, Issue 3, pp 404-407)
4. VA Chervatyuk, IM Kushnir Anti-corrosion coatings based on aqueous bitumen-polymer composition with a high rate of formation (Physico-chemical mechanics of materials, №3, 2013, P.110-113)
5. VA Chervatyuk, IM Kushnir, OE Wallis System of anticorrosive coating based on bitumen-polymer composition (Bulletin of Lviv Polytechnic National University, "Chemistry, technology of substances and their application", № 761, NU Publishing House Lviv Polytechnic », Lviv-2013-P.261-264)

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C-COAT T250			
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2	89-44 P -SN1/16	The Diffuse reflection coefficient of the coating film C-COAT T250	9
3	89-48 P -SN1/1	The Mass fraction of non-volatile substances of the coating film C-COAT T250	11
4	89-55 P -SN1/1	The determination of hardness, SHORE "A" of the coating film C-COAT T250	13
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8	89-87 P -SN2/2	The DRY TIME of the coating film C-COAT T250	21
9	89-90 P -SN1/1	The Impact strength of the coating film C-COAT T250	23
10	89-92 P -SN2/2	The Resistance to the static effects of water of the coating film. Temperature stability of the coating +100°C C-COAT T250	25
11	89-97 P -SN1/1	The Apperance of the coating film C-COAT T250	27
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The Thermal Conductivity of the coating film C-COAT™T250

Report No : 89-42 P -SN1/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3758-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-4994/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	02/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Thermal Conductivity (W/m*K), not more	DSTU D B 2.5-41 / ASTM C 518-10	0.035
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Test Method	: DSTU D B 2.5-41 / ASTM C 518-10
Conditioning of Specimen	: Good
Method variation	: Nil
Remarks	: (I) Specimen was conditioned in such a way that change in mass within 24h, was less than 1%; (ii) Preparation of specimen was carried out by Client (iii) Conditioning of specimen was carried out in accordance with DSTU(ДСТУ) B.V 2.5-41 (iv) Thermal Conductivity of C-COAT Standard (T250) was measured by measuring the "K" value of polystyrene foam. This polystyrene was coated with C-COAT™ insulation and "K" value was measured again. Reported value is in a difference in the "K" value.



Authorized signatory
 Head of the Laboratory *Chervatiyk V.A.*

TEST REPORT

The instrument used, description of samples tested and tabulated results.



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1. INSTRUMENT used in method for Certification



2. SAMPLES used in method for Certification

Sample size: 300 x 300 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	0.0345
Test No 2	0.0353
Test No 3	0.0350



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The Diffuse reflection coefficient of the coating film C-COAT™T250

Report No : 89-44 P -SN1/16

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3901-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5351/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Diffuse reflection coefficient, % (not less than)	GOST 896-69	90
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Test Method : GOST 896-69
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

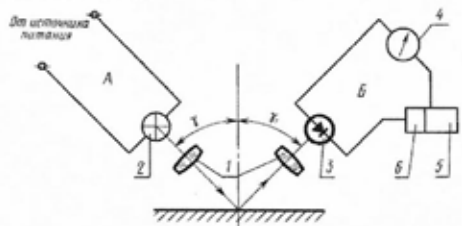
Authorized signatory :
 Head of the Laboratory : *Chervatiyk V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certificat



Bliced/Gloss-measures FB-2



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	90
Test No 2.	89
Test No 3	91





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The Mass fraction of non-volatile substances of the coating film C-COAT™T250

Report No : 89-48 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No : P-3390-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	
Contractor	: NP	Sample No : 01-5135/1
Consultant	: NP	Date of Sampling : NP
Project	: Co	Date Sample Received : 02/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date day started : 04/09/2021
Sample Description	: Coating Material	Date test completed : 22/09/2021
Size of Sample	: NP	Report Date : 22/09/2021
Supplier	: Client	Date of Calibration : 02/09/2021
Manufacturer	: Client	Relative Humidity : 50%
Sampled by	: Client	Testing Room Temp. : 24°C
Sample brought in by	: Client	Tested by : CHERV

Determination of non-volatile-matter content substances %, not less	DSTU ISO 3251 cluster 6.6	58,0
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Test Method : DSTU ISO 3251 cluster 6.6
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

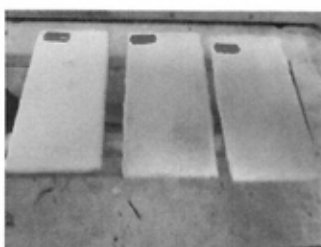
Authorized signatory
 Head of the Laboratory  Chervatiyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	58,0
Test No 2.	58,0
Test No 3	58,0



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The determination of hardness, SHORE "A" of the coating film C-COAT™T250

Report No : 89-55 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3938-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5413/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of indentation hardness with a durometer (Shore "A" hardness).	ISO 868: 2003	A/15:64
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Test Method : ISO 868:2003
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

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TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	15:60
Test No 2.	15:64
Test No 3	15:64





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The Solar Reflective Index of the coating film C-COAT™T250

Report No : 89-71 P -SN1/11

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3981-3
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5371/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	06/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Solar Reflective Index (SRI), % (not less than)	ASTM E 1980:11	105.3
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Test Method : ASTM E 1980:11
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks : SRI for low wind condition

Authorized signatory
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TEST REPORT

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1. INSTRUMENT used in method for Certificat



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	105.28
Test No 2.	105.30
Test No 3	105.31



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The Adhesion of the coating film C-COAT™T250

Report No : 89-74 P -SN1/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3897-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5312/2
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The adhesion MPa of the coating film: Concrete Brick Steel	DSTU ISO 4624	1.3 1.5 1.0
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Test Method : DSTU ISO 4624
Conditioning of Specimen : Good
Method variation : Nil
Remarks :

Authorized signatory : 
Head of the Laboratory : Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.



1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	1.3	Test No 1	1.5	Test No 1	1.0
Test No 2.	1.3	Test No 2	1.48	Test No 2	1.0
Test No 3	1.27	Test No 3	1.5	Test No 3	1.0






The Determination of water permeability of the coating film C-COAT™T250

Report No : 89-80 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3898-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147		
	AUSTRALIA		
Contractor	: NP	Sample No :	01-5311/1
Consultant	: NP	Date of Sampling :	NP
Project	: Co	Date Sample Received :	02/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date day started :	07/09/2021
Sample Description	: Coating Material	Date test completed :	22/09/2021
Size of Sample	: NP	Report Date :	22/09/2021
Supplier	: Client	Date of Calibration :	02/09/2021
Manufacturer	: Client	Relative Humidity :	50%
Sampled by	: Client	Testing Room Temp. :	24°C
Sample brought in by	: Client	Tested by :	CHERV

Determination of water permeability, % not more than	DSTU EN 1062-3:2015	2
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Test Method : DSTU EN 1062-3:2015
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

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TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification

- Scale analytical – VLA 200 - - Accuracy class, error: 0.0001 gram;
- Drying laboratory cabinet - SNOL -3.5 3.5 5/3 - Accuracy class, error: 2 °C ;
- Glass thermometer, laboratory – TL 5 - Accuracy class, error: 1 °C.

2. SAMPLES used in method for Certification



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Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	2
Test No 2.	2
Test No 3	2.2





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The DRY TIME of the coating film C-COAT™T250

Report No : 89-87 P –SN2/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No : P-3996-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	
Contractor	: NP	Sample No : 01-5314/1
Consultant	: NP	Date of Sampling : NP
Project	: Co	Date Sample Received : 07/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date day started : 14/09/2021
Sample Description	: Coating Material	Date test completed : 22/09/2021
Size of Sample	: NP	Report Date : 22/09/2021
Supplier	: Client	Date of Calibration : 02/09/2021
Manufacturer	: Client	Relative Humidity : 50%
Sampled by	: Client	Testing Room Temp. : 24°C
Sample brought in by	: Client	Tested by : CHERV

Drying time - (to touch) 20±2°C, hour, not more:	DSTU ISO 9117-1	0,8
Dry Time (allowed to walk), (20±2) °C, hour, not more:	DSTU ISO 9117-1	21

Test Method : DSTU ISO 9117-1
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Gheratyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	0.8	Test No 1	21
Test No 2.	0.8	Test No 1	21.5
Test No 3	0.8	Test No 1	21



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The Impact strength of the coating film C-COAT™T250

Report No : 89-90 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3968-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5333/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The Impact strength of the coating film	DSTU ISO 9117-1	40
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Test Method : DSTU ISO 9117-1
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory : 
 Head of the Laboratory : Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	40
Test No 2.	39.4
Test No 3	40



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The Resistance to the static effects of water of the coating film

Temperature stability of the coating +100°C C-COAT™T250

Report No : 89-92 P –SN2/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3966-3
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5343/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	06/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Resistance to the static effects of water at a temperature (20±2) oC, hour, not less	DSTU ISO 2812-2	Withstand
Temperature stability of the coating, 100 °C, not less 1 h	TU U 20.3-412310002-002:2019	Withstand

Test Method : DSTU ISO 2812-2
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatiyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	withstand
Test No 2.	withstand
Test No 3	withstand



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The Appearance of the coating film C-COAT™T250

Report No : 89-97 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3964-3
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5351/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The appearance of the coating film	TU U 20.3-41231002-002:2019	Smooth, homogeneous surface without foreign inclusions, color white
------------------------------------	-----------------------------	--

Test Method : Appearance according TU
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *[Signature]* Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.



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1. INSTRUMENT used in method for Certification



2. SAMPLES used in method for Certification

Sample size:	100 x 200	[mm]
Coating thickness:	1.0	[mm]
C-COAT modification	T250	

3. TABULATED RESULTS of measurement

Page 3 of 3

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www.ipm.lviv.ua



The Elasticity of the coating film C-COAT™ T250

Report No : 89-97 P -SN1/4

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No : P-3988-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	
Contractor	: NP	Sample No : 01-5374/1
Consultant	: NP	Date of Sampling : NP
Project	: Co	Date Sample Received : 07/09/2021
Sample Name	: Insulation Coating C-COAT™ T250	Date day started : 13/09/2021
Sample Description	: Coating Material	Date test completed : 22/09/2021
Size of Sample	: NP	Report Date : 22/09/2021
Supplier	: Client	Date of Calibration : 02/09/2021
Manufacturer	: Client	Relative Humidity : 50%
Sampled by	: Client	Testing Room Temp. : 24°C
Sample brought in by	: Client	Tested by : CHERV

The elasticity of the coating film (Band Test)	DSTU ISO 1519	5.0
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Test Method : DSTU ISO 1519
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

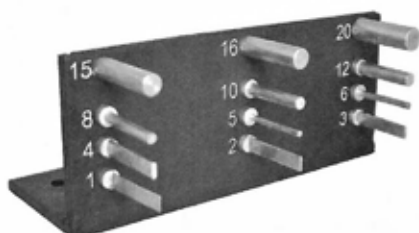
Authorized signatory
 Head of the Laboratory  Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T250

3. TABULATED RESULTS of measurement

Test No 1	5
Test No 2.	5
Test No 3	4.7





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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory № 11

	C-COAT Standard NF		
No#	Report Number	Description	Page No.
1	89-46 P -SN1/5	The Thermal Conductivity of the coating film C-COAT Standard NF	33
2	89-58 P -SN1/4	The determination of hardness, SHORE "A" of the coating film C-COAT Standard NF	35
3	89-58 P -SN1/11	The Diffuse reflection coefficient of the coating film C-COAT Standard NF	37
4	89-69 P -SN1/1	The Mass fraction of non-volatile substances of the coating film C-COAT Standard NF	39
5	89-72 P -SN1/5	The Solar Reflective Index of the coating film C-COAT Standard NF	41
6	89-76 P -SN1/3	The Adhesion of the coating film C-COAT Standard NF	43
7	89-79 P -SN1/1	The DRY TIME of the coating film C-COAT Standard NF	45
8	89-83 P -SN1/4	The Determination of water permeability of the coating film C-COAT Standard NF	47
9	89-89 P -SN1/4	The Impact strength of the coating film C-COAT Standard NF	49
10	89-95 P -SN3/6	The Resistance to the static effects of water of the coating film. Temperature stability of the coating +100°C C-COAT Standard NF	51
11	89-97 P -SN3/5	The Apperance of the coating film C-COAT Standard NF	53
12	89-98 P -SN3/2	The Elasticity of the coating film C-COAT Standard NF	55

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The Thermal Conductivity of the coating film C-COAT™ Standard NF

Report No : 89-46 P -SN1/5

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3759-5
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-4999/3
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	02/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Thermal Conductivity (W/m*K), not more	DSTU D B 2.5-41 / ASTM C 518-10	0.035
---	---------------------------------	-------

Test Method	: DSTU D B 2.5-41 / ASTM C 518-10
Conditioning of Specimen	: Good
Method variation	: Nil
Remarks	: (I) Specimen was conditioned in such a way that change in mass within 24h, was less than 1%; (ii) Preparation of specimen was carried out by Client (iii) Conditioning of specimen was carried out in accordance with DSTU B.V 2.5-41 (iv) Thermal Conductivity of C-COAT Standard NF was measured by measuring the "K" value of polystyrene foam. This polystyrene was coated with C-COAT™ insulation and "K" value was measured again. Reported value is in a difference in the "K" value.

Authorized signatory
 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11

1. **INSTRUMENT used in method for Certification**



2. **SAMPLES used in method for Certification**

Sample size: 300 x 300 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. **TABULATED RESULTS of measurement**

Test No 1	0.0345
Test No 2	0.0353
Test No 3	0.0350



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Laboratory No. 11

The determination of hardness, SHORE "A" of the coating film C-COAT™ Standard NF

Report No : 89-58 P -SN1/4

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3939-9
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5435/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of indentation hardness with a durometer (Shore "A" hardness).	ISO 868: 2003	A/15:64
--	---------------	---------

Test Method : ISO 868:2003
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

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 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





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Laboratory No. 11

2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	15:60
Test No 2.	15:64
Test No 3	15:64



The Diffuse reflection coefficient of the coating film C-COAT™ Standard NF

Report No : 89-58 P -SN1/11

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3891-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5362/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Diffuse reflection coefficient, % (not less than)	GOST 896-69	90
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Test Method : GOST 896-69
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

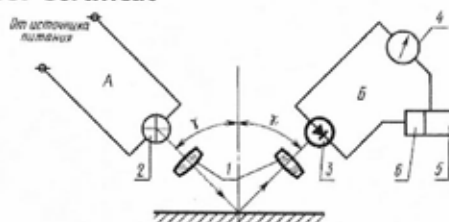
Authorized signatory
 Head of the Laboratory *Cherv V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certificat



Blided/Gloss-measures FB-2



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	90
Test No 2.	89
Test No 3	91





The Mass fraction of non-volatile substances of the coating film C-COAT™ Standard NF

Report No : 89-69 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3420-4
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5157/2
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	04/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of non-volatile-matter content substances %, not less	DSTU ISO 3251 cluster 6.6	60,0
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Test Method : DSTU ISO 3251 cluster 6.6
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

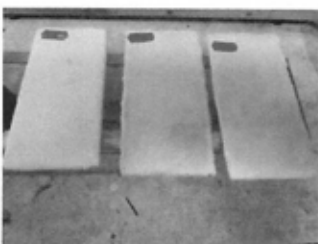
Authorized signatory : 
 Head of the Laboratory : Hervatiyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





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Laboratory No. 11

2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	60,0
Test No 2.	60,0
Test No 3	61,0



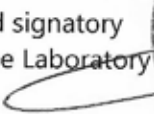
The Solar Reflective Index of the coating film C-COAT™ Standard NF

Report No : 89-72 P -SN1/5

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3581-
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5389/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	06/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Solar Reflective Index (SRI), % (not less than)	ASTM E 1980:11	105.3
--	----------------	--------------

Test Method : ASTM E 1980:11
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks : SRI for low wind condition

Authorized signatory
 Head of the Laboratory  Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certificat



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Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	105.28
Test No 2.	105.30
Test No 3	105.31



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11

The Adhesion of the coating film C-COAT™ Standard NF

Report No : 89-76 P -SN1/3

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3899-6
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5329/2
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The adhesion MPa of the coating film: Concrete Brick Steel	DSTU ISO 4624	1.3 1.5 1.0
---	---------------	--

Test Method : DSTU ISO 4624
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *Chervatiyk V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.



1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	1.3	Test No 1	1.5	Test No 1	1.0
Test No 2.	1.3	Test No 2	1.48	Test No 2	1.0
Test No 3	1.27	Test No 3	1.5	Test No 3	1.0





The DRY TIME of the coating film C-COAT™ Standard NF

Report No : 89-79 P –SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3942-3
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5378/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	07/09/2021
Project	: Co	Date day started :	14/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Drying time - (to touch) 20±2°C, hour, not more:	DSTU ISO 9117-1	0,8
Dry Time (allowed to walk), (20±2) °C, hour, not more:	DSTU ISO 9117-1	21

Test Method : DSTU ISO 9117-1
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *Yusef Chervatyk V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	0.8	Test No 1	21
Test No 2.	0.8	Test No 1	21.5
Test No 3	0.8	Test No 1	21



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 Laboratory No. 11

The Determination of water permeability of the coating film C-COAT™ Standard NF

Report No : 89-83 P -SN1/4

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3897-6
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5341/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of water permeability, % not more than	DSTU EN 1062-3:2015	2
--	---------------------	---

Test Method : DSTU EN 1062-3:2015
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatiyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification

Scale analytical – VLA 200 - - Accuracy class, error: 0.0001 gram;
 Drying laboratory cabinet - SNOL -3.5 3.5 5/3 - Accuracy class, error: 2 °C ;
 Glass thermometer, laboratory – TL 5 - Accuracy class, error: 1 °C.

2. SAMPLES used in method for Certification



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Laboratory No. 11

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	2
Test No 2.	2
Test No 3	2.2





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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11

The Impact strength of the coating film C-COAT™ Standard NF

Report No : 89-89 P -SN1/4

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3972-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5348/3
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The Impact strength of the coating film	DSTU ISO 9117-1	40
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Test Method : DSTU ISO 9117-1
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	40
Test No 2.	39.4
Test No 3	40



The Resistance to the static effects of water of the coating film
Temperature stability of the coating +100°C C-COAT™ Standard NF

Report No : 89-95 P –SN3/6

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3969-9
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5349/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	06/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Resistance to the static effects of water at a temperature (20±2) °C, hour, not less	DSTU ISO 2812-2	Withstand
Temperature stability of the coating, 100 °C, not less 1 h	TU U 20.3-412310002-002:2019	Withstand

Test Method : DSTU ISO 2812-2
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	withstand
Test No 2.	withstand
Test No 3	withstand



The Appearance of the coating film C-COAT™ Standard NF

Report No : 89-97 P –SN3/5

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3966-8
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5359/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The appearance of the coating film	TU U 20.3-41231002-002:2019	Smooth, homogeneous surface without foreign inclusions, color white
------------------------------------	-----------------------------	--

Test Method : Appearance according TU
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervanuk V.A.


TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	white
Test No 2.	white
Test No 3	white



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The Elasticity of the coating film C-COAT™ Standard NF

Report No : 89-98 P –SN3/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3898-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5354/2
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	07/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ Standard NF	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The elasticity of the coating film (Band Test)	DSTU ISO 1519	5.0
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Test Method : DSTU ISO 1519
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

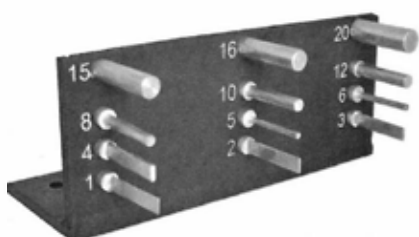
Authorized signatory
 Head of the Laboratory *Shevatiyk V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





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Laboratory No. 11

2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification Standard NF

3. TABULATED RESULTS of measurement

Test No 1	5
Test No 2.	5
Test No 3	4.7



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory № 11

C-COAT T300			
No #	Report Number	Description	Page No.
1	89-45 P -SN1/1	The Thermal Conductivity of the coating film C-COAT T300	59
2	89-46 P -SN1/1	The Mass fraction of non-volatile substances of the coating film C-COAT T300	61
3	89-50 P -SN1/6	The Diffuse reflection coefficient of the coating film C-COAT T300	63
4	89-54 P -SN1/1	The determination of hardness, SHORE "A" of the coating film C-COAT T300	65
5	89-70 P -SN1/8	The Solar Reflective Index of the coating film C-COAT T300	67
6	89-75 P -SN1/2	The Adhesion of the coating film C-COAT T300	69
7	89-82 P -SN2/1	The Determination of water permeability of the coating film C-COAT T300	71
8	89-91 P -SN1/2	The Impact strength of the coating film C-COAT T300	73
9	89-91 P -SN2/1	The DRY TIME of the coating film C-COAT T300	75
10	89-94 P -SN1/2	The Elasticity of the coating film C-COAT T300	77
11	89-96 P -SN2/4	The Resistance to the static effects of water of the coating film. Temperature stability of the coating +100°C C-COAT T300	79
12	89-99 P -SN1/1	The Appearance and Hard content of the coating film C-COAT T300	81

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 Laboratory No. 11

The Thermal Conductivity of the coating film C-COAT™T300

Report No : 89-45 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No : P-3760-3
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	
Contractor	: NP	Sample No : 01-4950/1
Consultant	: NP	Date of Sampling : NP
Project	: Co	Date Sample Received : 02/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date day started : 02/09/2021
Sample Description	: Coating Material	Date test completed : 22/09/2021
Size of Sample	: NP	Report Date : 22/09/2021
Supplier	: Client	Date of Calibration : 02/09/2021
Manufacturer	: Client	Relative Humidity : 50%
Sampled by	: Client	Testing Room Temp. : 24°C
Sample brought in by	: Client	Tested by : CHERV

Thermal Conductivity (W/m*K), not more	DSTU D B 2.5-41 / ASTM C 518-10	0.035
---	---------------------------------	-------

Test Method	: DSTU D B 2.5-41 / ASTM C 518-10
Conditioning of Specimen	: Good
Method variation	: Nil
Remarks	: (I) Specimen was conditioned in such a way that change in mass within 24h, was less than 1%; (ii) Preparation of specimen was carried out by Client (iii) Conditioning of specimen was carried out in accordance with DSTU(ДСТУ) B.V 2.5-41 (iv) Thermal Conductivity of C-COAT Standard (T250) was measured by measuring the “K” value of polystyrene foam. This polystyrene was coated with C-COAT™ insulation and “K” value was measured again. Reported value is in a difference in the “K” value.

Authorized signatory
 Head of the Laboratory Chervatuk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.



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Laboratory No. 11

1. INSTRUMENT used in method for Certification

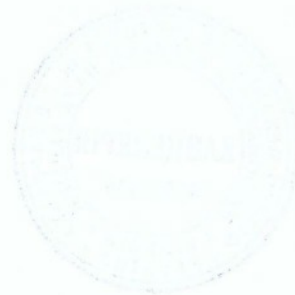


2. SAMPLES used in method for Certification

Sample size: 300 x 300 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	0.0343
Test No 2.	0.0351
Test No 3	0.0350





The Mass fraction of non-volatile substances of the coating film C-COAT™T300

Report No : 89-46 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3300-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5129/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	04/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of non-volatile-matter content substances %, not less	DSTU ISO 3251 cluster 6.6	56,0
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Test Method : DSTU ISO 3251 cluster 6.6
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

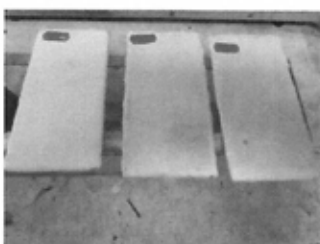
Authorized signatory
 Head of the Laboratory  Chervatiuk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.2 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	56,0
Test No 2.	56,0
Test No 3	56,0





The Diffuse reflection coefficient of the coating film C-COAT™T300

Report No : 89-50 P -SN1/6

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-39111-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5381/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	04/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Diffuse reflection coefficient, % (not less than)	GOST 896-69	93
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Test Method : GOST 896-69
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

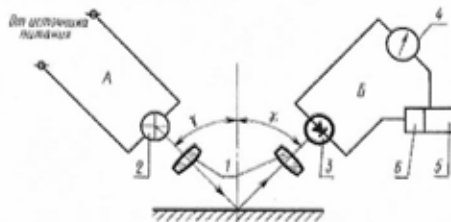
Authorized signatory
 Head of the Laboratory *Chervenyk V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certificat



Bliced-measures FB-2



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.2 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	93
Test No 2.	93
Test No 3	94





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The determination of hardness, SHORE "A" of the coating film C-COAT™T300

Report No : 89-54 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3929-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5393/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of indentation hardness with a durometer (Shore "A" hardness).	ISO 868: 2003	A/15:64
--	---------------	---------

Test Method : ISO 868:2003
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *Chervyak V.A.*



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	15:64
Test No 2.	15:65
Test No 3	15:64



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The Solar Reflective Index of the coating film C-COAT™T300

Report No : 89-70 P -SN1/8

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3975-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5369/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Solar Reflective Index (SRI), % (not less than)	ASTM E 1980:11	110.0
--	----------------	--------------

Test Method : ASTM E 1980:11
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks : SRI for Low wind condition

Authorized signatory
 Head of the Laboratory   V.A. Chervatyi

TEST REPORT

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1. INSTRUMENT used in method for Certificat



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.2 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	110.05
Test No 2.	110.00
Test No 3	109.95



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Laboratory No. 11

The Adhesion of the coating film C-COAT™T300

Report No : 89-75 P -SN1/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3899-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5312/2
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The adhesion MPa of the coating film: Concrete Brick Steel	DSTU ISO 4624	1.3 1.5 1.0
---	---------------	--

Test Method : DSTU ISO 4624
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *(Signature)* **Chervatyk V.A.**



TEST REPORT

The instrument used, description of samples tested and tabulated results.



1. INSTRUMENT used in method for Certification



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2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	1.3	Test No 1	1.5	Test No 1	1.0
Test No 2.	1.3	Test No 2	1.48	Test No 2	1.0
Test No 3	1.27	Test No 3	1.5	Test No 3	1.0





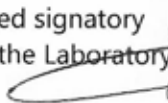
The Determination of water permeability of the coating film C-COAT™T300

Report No : 89-82 P –SN2/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3902-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5325/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	02/09/2021
Project	: Co	Date day started :	07/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Determination of water permeability, % not more than	DSTU EN 1062-3:2015	2.2
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Test Method : DSTU EN 1062-3:2015
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification

Scale analytical – VLA 200 - - Accuracy class, error: 0.0001 gram;
 Drying laboratory cabinet - SNOL -3.5 3.5 5/3 - Accuracy class, error: 2 °C ;
 Glass thermometer, laboratory – TL 5 - Accuracy class, error: 1 °C.

2. SAMPLES used in method for Certification



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Laboratory No. 11

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	2.2
Test No 2.	2.1
Test No 3	2.2





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 Laboratory No. 11


The Impact strength of the coating film C-COAT™T300

Report No : 89-91 P -SN1/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3969-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5337/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The Impact strength of the coating film	DSTU 4765 ISO 6272-2002	40
---	-------------------------	----

Test Method : DSTU 4765 ISO 6272-2002
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	40
Test No 2.	39.4
Test No 3	40



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 Laboratory No. 11

The DRY TIME of the coating film C-COAT™T300

Report No : 89-91 P –SN2/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No : P-3969-1
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	
Contractor	: NP	Sample No : 01-5315/1
Consultant	: NP	Date of Sampling : NP
Project	: Co	Date Sample Received : 07/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date day started : 14/09/2021
Sample Description	: Coating Material	Date test completed : 22/09/2021
Size of Sample	: NP	Report Date : 22/09/2021
Supplier	: Client	Date of Calibration : 02/09/2021
Manufacturer	: Client	Relative Humidity : 50%
Sampled by	: Client	Testing Room Temp. : 24°C
Sample brought in by	: Client	Tested by : CHERV

Drying time - (to touch) 20±2°C, hour, not more:	DSTU ISO 9117-1	0,8
Dry Time (allowed to walk), (20±2) °C, hour, not more:	DSTU ISO 9117-1	21

Test Method : DSTU ISO 9117-1
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory  Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines

Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	0.8	Test No 1	21
Test No 2.	0.8	Test No 1	21.5
Test No 3	0.8	Test No 1	21



The Elasticity of the coating film C-COAT™T300

Report No : 89-94 P -SN1/2

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3980-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5369/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	07/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The elasticity of the coating film (Bend test (cylindrical mandrel))	DSTU ISO 1519	5.0
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Test Method : DSTU ISO 1519
 Conditioning of Specimen : Good
 Method variation : Nil
 Remarks :

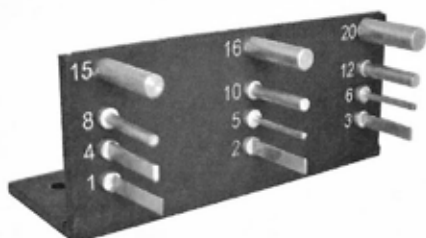
Authorized signatory
 Head of the Laboratory *[Signature]* Chervatiy V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification





2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	5.0
Test No 2.	5.0
Test No 3	4.8



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Laboratory No. 11

**The Resistance to the static effects of water of the coating film
Temperature stability of the coating +300°C C-COAT™T300**

Report No : 89-96 P –SN2/4

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3969-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5353/6
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	06/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

Resistance to the static effects of water at a temperature (20±2) °C, hour, not less	DSTU ISO 2812-2	Withstand
Temperature stability of the coating, 300 °C, not less 1 h	TU U 20.3-412310002-002:2019	Withstand

Test Method : DSTU ISO 2812-2
Conditioning of Specimen : Excellent
Method variation : Nil
Remarks :

Authorized signatory
Head of the Laboratory  13544506 Chervatyk V.A.



TEST REPORT

The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



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Laboratory No. 11



2. SAMPLES used in method for Certification

Sample size: 100 x 200 [mm]
Coating thickness: 1.0 [mm]
C-COAT modification T300

3. TABULATED RESULTS of measurement

Test No 1	withstand
Test No 2.	Withstand
Test No 3	withstand



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 Laboratory for Certification Testing of corrosion-resistant insulating coatings of pipelines
 Laboratory No. 11

The Appearance and Hard content of the coating film C-COAT™T300

Page 1 of 3

Report No : 89-99 P -SN1/1

Client	: C-COAT Insulation Australia Pty Ltd	Lab Project No :	P-3969-2
Address	: Unit 4, 128 Station Road, Seven Hills NSW 2147 AUSTRALIA	Sample No :	01-5356/1
Contractor	: NP	Date of Sampling :	NP
Consultant	: NP	Date Sample Received :	05/09/2021
Project	: Co	Date day started :	13/09/2021
Sample Name	: Insulation Coating C-COAT™ T300	Date test completed :	22/09/2021
Sample Description	: Coating Material	Report Date :	22/09/2021
Size of Sample	: NP	Date of Calibration :	02/09/2021
Supplier	: Client	Relative Humidity :	50%
Manufacturer	: Client	Testing Room Temp. :	24°C
Sampled by	: Client	Tested by :	CHERV
Sample brought in by	: Client		

The appearance of the coating film	TU U 20.3-41231002-002:2019	Smooth, homogeneous surface without foreign inclusions, color white
Mass fraction of hard content in substances %, %, not less	DSTU ISO 3251 cluster 6.6	58.0 (test error 0.8%)

Test Method : Appearance according TU
 Conditioning of Specimen : Excellent
 Method variation : Nil
 Remarks :

Authorized signatory
 Head of the Laboratory *Chervatiyk V.A.*



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TEST REPORT

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The instrument used, description of samples tested and tabulated results.

1. INSTRUMENT used in method for Certification



2. SAMPLES used in method for Certification

Sample size:	100 x 200	[mm]
Coating thickness:	1.0	[mm]
C-COAT modification	T300	

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