

*[National Emblem of Ukraine]*

UKRAINIAN STATE COMMITTEE ON TECHNICAL REGULATIONS  
AND CONSUMER POLICY  
UkrSEPRO OFFICIAL CERTIFICATION SYSTEM

**CERTIFICATE OF COMPLIANCE**

Series ДГ

Registered in the Register under No. **UA 1.084.0060902-04**

Validity term from **August 2, 2004** to **July 1, 2005**

Product name **Liquid Rubber polymerized asphalt emulsion**

**2715 00 9000**

Official Product Code

Complies with the requirements of **DSTU Б В.2.7-77-98 “Butyl rubber waterproofing compounds. Specifications.”**, p. 4.1.3, Table 1 (except for items 1, 2, 3); further according to **Supplement Series ГВ No. 416761**.

Manufacturer **LAFARGE NORTH AMERICA, Canada**

Certificate issued to **“Market-zbut” TOV, 7 Stus St., Ostriv, Ternopil District, Ternopil Region, 47731, Unified Ukrainian company ID code 25345852**

Additional information **The Liquid Rubber polymerized asphalt emulsion was delivered as per the invoice dated February 5, 2004. Quantity: 17,560.00 kg.**

Certificate issued by **“Ternopil SEPRObud” Product Certification Agency (11 Tantsorov St., Ternopil, 46008, Tel. (0352) 25-44-83), Accreditation Certificate No. UA 4.001.084, dated November 17, 2000, extended by a letter from the Official Consumer Standards Office (Derzhspozhivstandart) dated June 23, 2004, No. 5630-6-10/24**

On the basis of **Certification testing report No. 04/165 dated July 26, 2004, from the “LvivbudmNDIproekt” Institute testing center; Accreditation certificate No. UA 6.001.H471 dated July 12, 2002, and No. 310/1П-2004 dated July 29, 2004, from the Ukrainian Scientific Research Center for Fire Safety Testing and Research, Accreditation certificate No. UA 6.001.T.176 dated January 15, 2001; Findings of the State Sanitary and Epidemiological Inspection dated April 23, 2004, certificate No. 5.03.02-03/16361 issued by the Head Office of Sanitation and Epidemiology of the Ministry of Health of Ukraine.**

Head of the Certification Authority <Signature – illegible> B. Prymich

*Official stamp:*

UKRBUDMATERIALY CORPORATION

CODE 14033115

“TERNOPIL SEPROBUD”

PRODUCT CERTIFICATION ORGAN

UA 4.001.084

No. 825137

The validity of a Certificate of Compliance can be verified through the UkrSEPRO System Register at (044) 268-5249, 268-9244

*[National Emblem of Ukraine]*

**MINISTRY OF HEALTH OF UKRAINE**

**APPROVED**

7 Grushevsky St., Kiev 01021  
Tel. 253-61-94, 253-94-17, Fax 293-94-84

Deputy Chief State  
Sanitation Physician of Ukraine  
<Signature – illegible>  
M.F. Burlak

*Official Stamp:*  
Ministry of Health of Ukraine  
Identification Code [illegible]  
*[National Emblem of Ukraine]*

**FINDINGS OF THE STATE SANITATION AND EPIDEMIOLOGY INSPECTION**

Dated *April 23*, 2004

No. 05.03.02-03/16631

1. Construction  
(Area of application of the subject of inspection)
2. Ukrainian Foreign Trade Goods Code: 271390900  
(Official code or designation)
3. Canada  
(Country of origin of the subject of certification)
4. CAPITAL UNITED CORPORATION, 2200 Lakeshore Blvd. West, Suite 103, Etobicoke, Ontario, Canada M8V 1A4. Tel. 416-251-8517, Fax 416-252-2693  
(Name and address of manufacturer, developer, owner or Ukrainian representative thereof; location, telephone, fax, e-mail, WWW, countries of registration, Unified Product Code or national number)
5. Contract No. DRBUD 0104 dated Feb. 5, 2004, with addenda between “Dobrobud-LTD” TOV (Ukraine) and CAPITAL UNITED CORPORATION (Canada)  
(Information regarding the contract for delivery to Ukraine)
6. “Dobrobud-LTD” TOV, 11 Trolleybus Street, Ternopil, Tel. 380-352-53561  
Fax: 380-352-433869, Ukraine, UFTG Code 25345757  
(Name and address of customer, location, telephone, fax, e-mail, WWW, countries of registration, Unified Product Code or national number)
7. CAPITAL UNITED CORPORATION, 2200 Lakeshore Blvd. West, Suite 103, Etobicoke, Ontario, Canada M8V 1A4. Tel. 416-251-8517, Fax 416-252-2693  
(If applicable, the name and address of intermediary, shipper, etc., location, telephone, fax, e-mail, WWW, countries of registration, Unified Product Code or national number)

According to the results of the sanitary and epidemiological inspection,  
the following product:

Polymerized Asphalt Emulsion

(Liquid rubber, sprayed liquid rubber, antiskid liquid rubber)

(Subject of inspection)

complies with the requirements of sanitary legislation of Ukraine is harmless to human health subject to compliance with the requirements of these findings and may be used for its intended purpose in the area of application.

The following is responsible for compliance with the requirements of these findings:

“Dobrobud-LTD” TOV

(Name)

The original of these findings shall not be handed over to third parties.

Term of validity of the findings – 2 years pursuant to Contract No. DRBUD 0104 of Feb. 5, 2004 with addenda between “Dobrobud-LTD” TOV (Ukraine) and CAPITAL UNITED CORPORATION (Canada).

**The subject product shall comply with the following requirements with respect to human health and safety.**

In accordance with the Guidelines for Sanitary and Hygienic Evaluation of Polymer Materials Intended for Applications in Construction and Furniture Manufacturing No. 6035 A-91 approved on August 12, 1991, the saturated and aromatic hydrocarbon emissions into the air must not exceed acceptable levels (AL): saturated hydrocarbons – 1.0 mg/m<sup>3</sup>, toluene – 0.6 mg/m<sup>3</sup>, xylol – 0.2 mg/m<sup>3</sup>, benzol – 1.5 mg/m<sup>3</sup> (MV No. 2328-81 dated March 18, 1981)

(According to medical criteria of human health and safety / indicators, maximum acceptable levels, etc.)

According to GOST 12.1.005-88, the total concentration of hydrocarbons in the working area air must not exceed the following concentrations: saturated hydrocarbons – 300.0 mg/m<sup>3</sup>, toluene – 150 mg/m<sup>3</sup>, xylol – 50 mg/m<sup>3</sup>, benzol – 15 mg/m<sup>3</sup>. To be used in accordance with the manufacturer's directions as to the storage and use conditions.

*[Illegible]*

Marking shall be done in the official language and include information on the manufacturing date, shelf life and use conditions.

*[Illegible]*

Sanitary and epidemiological inspection is not required at the border and during customs clearance.

Continuous state sanitary and epidemiological monitoring of compliance with the findings according to the effective sanitary norms and rules.

**Commission of experts:** Lviv Institute of Epidemiology and Hygiene, 12 Zelena St., Lviv, 79005

Tel/fax (0322) 76-23-80, e-mail: epidem@mail.lviv.ua.

(Location, telephone, fax)

**Inspection report** No. 585 dated April 19, 2004

(Report number and approval date)

**Deputy Head of the Commission of Experts** O.O. Tarasiuk <Signature – illegible>

(Last name and initials)

**“LvivbudmNDIproekt” Lviv State  
Science and Design Institute  
“LvivbudmNDIproekt”  
Institute Testing Center**

*Round Stamp:*

UKRAINE – UKRBUDMATERIALY  
STATE CORPORATION  
“LvivbudmNDIproekt” Lviv State  
Science and Design Institute  
05516106

**APPROVED**

**Head of the “LvivbudmNDIproekt”  
Institute Testing Center**

*<Signature – illegible>* I.S. IVASIV

July 26, 2004

**REPORT No. 04/165**

On the results of certification testing of  
polymerized asphalt emulsion – Liquid Rubber  
manufactured by LAFARGE NORTH AMERICA  
(Canada)

Lviv

July 22, 2004

Performed by: “LvivbudmNDIproekt” Institute Testing Center  
Accreditation certificate No. UA.6.001.H.471  
Dated July 12, 2002

Client: “Market-Zbut” TOV

Grounds for performing the work: resolution of the product certification organ, Ternopil SEPRObud, No. 084/003-04 dated July 8, 2004. Agreement No. 04/10-7y dated July 13, 2004.

1. Purpose of testing: verification of compliance of the polymerized asphalt emulsion – Liquid Rubber – with the requirements of Government Standards DSTU Б B.2.7-77-98 “Construction Materials. Sealing and Waterproofing Butyl Rubber Compounds. Specifications”, Item 4.3.1, Table 1 (with the exception of items 1, 2, 3), DSTU DSTU Б B.2.7-79-98 “Construction Materials. Waterproofing Butyl and Bitumen-Butyl Rubber Compounds. Specifications”, Item 4.1.7, Table 1 (specimen flexibility).

2. Testing period: July 13 – July 22, 2004.

3. Specimen selection record by the product certification organ, Ternopil SEPRObud, in the quantity of 1 jar with a 5 L capacity, dated July 9, 2004.

4. Product characteristics:

- sealing compounds
- purpose – the compounds are intended for performing external work while sealing joints and waterproofing concrete and reinforced concrete structures during construction as well as for complete protection of metal and wood.

5. Standard-setting documents:

- DSTU Б B.2.7-77-98 “Construction Materials. Sealing and Waterproofing Butyl Rubber Compounds. Specifications.”

- DSTU Б В.2.7-79-98 “Construction Materials. Waterproofing Butyl and Bitumen-Butyl Rubber Compounds. Specifications.”
- DSTU Б В.2.7-84-99 (GOST 26589-94) “Construction Materials. Roofing and Waterproofing Compounds. Specifications.”
- GOST 26433.1-85 “Measuring Rules.”

6. Types and primary characteristics of measuring instruments and test equipment:

Table 6.1

Name	Type, brand, designation	Precision, error class
1. Psychrometer	ВИТ-1	Cl. 2
2. Aneroid barometer	М-22А	±0.1 Mbar (gPa) per 1°C
3. Thermograph per GOST 6416-75	М-18А	Cl. 2
4. Thermometer	Tm (0-50)°C	Cl. 1
5. Adjustable trammels per GOST 166-89	ШЦ-1-125-0.1	±0.1 mm
6. Laboratory scales	Per GOST 24107-80	0.1 gr.
7. Laboratory balance	Per GOST 24104-88	0.001 gr.
8. Stop-watch	СОПр-2а-3-00	Cl. 2
9. Testing machine	МИИ-100	±2%
10. Drying cabinet	Типе СПОЛ 100 ±5°C	±5°C
11. Freezing chamber	КХА-05	±1°C

The testing equipment has been certified and the measuring instruments checked in 2003.

7. Testing conditions:

- ambient temperature - 18-20°C;
- atmospheric pressure - 720-725 mm mercury column;
- air humidity - 85%

8. Unusual behavior of products during tests: none detected.

9. Test Results:

9.1 Results of determination of physical and mechanical properties of the compound (DSTU Б В.2.7-77-98 item 4.1.3, Table 1, except for attributes 1, 2, 3), specimen flexibility (DSTU Б В.2.7-79-98, item 4.1.7, Table 1).

Table 9.1

Names of attributes, parameters	Values of attributes, parameters, dimensions per norms	Actual values of attributes, parameters, dimensions	Acceptable measurement error	Measuring instruments and test equipment used
1	2	3	4	5
1. Density of the hardened compound (vulcanized rubber), kg/m <sup>3</sup> , range	900-1100	1060	0.01 g	Laboratory balance
2. Conventional tearing strength, mPa, at least	0.55	0.89	±2%	МИИ-100 Testing machine

3. Relative elongation before tearing, %, at least	350	1180	0.4 mm	Metal ruler
4. Strength of adhesion to concrete, mPa, at least	0.42	0.87	±2%	МИИ-100 Testing machine
5. Water absorption over 24 hrs, by mass, %, not more than	2.0	0.4	0.01 g	Laboratory balance
6. Watertightness, mPa (atm), at least	0.001 (0.01)	After 24 hrs no water appeared on the specimen surface and neither did any signs of tint change on the indicator paper		Polished glass tube
7. Heat resistance, °C, at least	+80	No buildup or sliding detected on specimen surfaces	±5°C	Drying cabinet
8. Cold resistance at minus 40°C	There must be no cracks, fractures or other types of damage	No cracks or damage detected	±1°C	Freezing chamber
9. Flexibility assessment	The specimen must be kept for 30 min at – 40°C. There must be no cracks, tears or other defects when the sample is wound onto a shaft with a diameter of 10 mm.	During the examination of the specimen through a magnifying lens, no cracks or other types of damage were detected.	±1°C	Freezing chamber

This report consists of 3 pages.

This report refers only to those specimens that were subjected to testing.

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**Testing Center Sector Head**     <Signature – illegible>     **O.F. Shkarlinsky**

**Testing Center Lead Engineer**     <Signature – illegible>     **S.V. Kozlinska**

**Testing Center Engineer**     <Signature – illegible>     **I.V. Reimer**

## CERTIFICATION

By "GERMA", Member of the Association of Enterprises and Organizations for the Creation, Manufacture and Application of Sealing and Waterproofing Materials, Manufactured Articles based thereon and Construction Products under the Academy of Construction of Ukraine

*[GERMA Logo]*

*By the decision of the Board of Directors of the Association, "MARKET-ZBUT" Limited Liability Company (Unified Ukrainian Product ID Code 2534585, 11 Trolleybus St., Ternopil) has been confirmed as a member of the GERMA Association under the Academy of Construction of Ukraine.*

*Official Stamp:*

Association of Enterprises and Organizations for the  
Creation, Manufacture and Application of Sealing and  
Waterproofing Materials, Manufactured Articles based  
thereon and Construction Products – Ukraine  
GERMA  
Identification Code 22690916

*September 3, 2004*

*President*

*GERMA Association*

*Academician with the*

*Academy of Construction of Ukraine* <Signature – illegible> *A.P. Baglai*