



Document Title:  
**Electrical Plastic Sealer and Insulation**

Document Type:  
**Material Specifications**

Document No.:  
**4350.292**

Originating Department:  
**Distribution Standards & Materials**

Issue Date:  
**January 20, 2023**

Effective Date:  
**Jan 23, 2023**

**Author**

Miguel J. Rios López, PE  
Standards Engineer, Distribution Standards & Materials

Signature and Date

**Jan 20, 2023**

**Reviewer**

Rafael Torres Martinez, PE  
Supervisor, Distribution Standards & Materials

Signature and Date

**Jan 20, 2023**

**Approver**

Ricardo Castro Gómez, PE  
Manager, Distribution Standards & Materials

Signature and Date

**Jan 23, 2023**

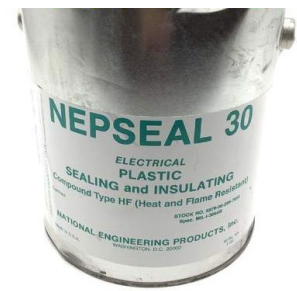
**Version History**

Date	Revision Comments
Jan. 20, 2023	Initial Release (Ver. 01)

Warehouse Catalog	Item Version	Date
038-84108	01	1/20/2023



Equipment Specification  
Document No.: 4350.292  
Item No.: 038-84108  
Asset Suite: 84108  
Originating Department: Distribution Engineering



## Electrical Plastic Sealer and Insulation

---

### 1. Introduction

This is a general specification that covers the minimum requirements for an electrical plastic sealer and insulation to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general mechanical characteristics of the material.

### 2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this material to LUMA on previous orders, will not have to furnish samples at bid opening. The material will be received at the LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

### 3. Quantity/Literature

Descriptive and technical literature must be supplied by vendor at time of bidding. This literature may include, but is not limited to details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification. For products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time for opening of bids, had been tested and/or approved by LUMA. Evidence of PREPA's and/or LUMA Energy's approval of the equipment or material shall be supplied by vendor if requested by LUMA Energy.

### 4. Markings

- 4.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 4.2. Packaging labels and tags shall be waterproof.

### 5. Equal or Approved Equal to

National Engineering Products, Inc. (Nepseal 30)

### 6. Packaging

All material and equipment shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.



**Equipment Specification**

**Document No.:** 4350.292

**Item No.:** 038-84108

**Asset Suite:** 84108

**Originating Department:** Distribution Engineering

## **Electrical Plastic Sealer and Insulation**

---

### **7. Number Per Package (Logistics)**

Standard Package: Two (2) gallon cans per box, or as requested by LUMA.

### **8. Acceptance Criteria**

8.1. Test required: certified by external laboratories.

8.2. Latest applicable codes, standards, and other regulations: ANSI/IEEE, ASTM, NEMA. The following standards shall form a part of this specification unless otherwise stated:

- a. MIL-I-3064B: Military specification for the electrical and physical requirements of the plastic-sealer compound.

### **9. Description**

9.1. Used for transformers connections insulation.

9.2. Shall provide electrical insulation properties and compatibility with the electrical cable jacketing material.

9.3. Shall be non-hardening, heat and flame resistant, type HF, keeping its plasticity after a long exposure to high temperature with no tendency to flow.

9.4. On flame contact, shall expand to approximately twice its volume.

9.5. Shall have no asbestos fiber.

9.6. Shall be oil and water resistant.

### **10. Inspection**

The acceptance of any material or equipment shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such materials were found later to be defective.

### **11. Proposal Information**

11.1. Submitted proposals must include:

- b. Technical information
- c. Table of Compliance completed by the bidder with reference. (See Appendix 1)

— End of Specification —



**Equipment Specification**

**Document No.:** 4350.292

**Item No.:** 038-84108

**Asset Suite:** 84108

**Originating Department:** Distribution Engineering

## **Electrical Plastic Sealer and Insulation**

---

# **Appendix**



**Equipment Specification**

**Document No.:** 4350.292

**Item No.:** 038-84108

**Asset Suite:** 84108

**Originating Department:** Distribution Engineering

---

## Electrical Plastic Sealer and Insulation

---

### Appendix 1: Table of Compliance

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the corresponding specification document (4350.292).		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document. (ANSI/IEEE, ASTM, NEMA, MIL-I)		
3	Material	Type HF Electrical Plastic Sealer		
4	Product Requirements	• Heat and Flame Resistant		
		• Oil and Water Resistant		
		• Non-Hardening		
		• Contains no asbestos fiber		
		• Expands twice its volume on flame contact.		











# 4350.292 Electrical Plastic Sealer and Insulation (1-20-23)

Final Audit Report

2023-01-23

Created:	2023-01-20
By:	Miguel Rios (miguel.rioslopez@lumapr.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAANKNEgKUIA56ogNlw3Awqd6RDI-aBe0KTN

## "4350.292 Electrical Plastic Sealer and Insulation (1-20-23)" History

-  Document created by Miguel Rios (miguel.rioslopez@lumapr.com)  
2023-01-20 - 7:36:30 PM GMT
-  Document e-signed by Miguel Rios (miguel.rioslopez@lumapr.com)  
Signature Date: 2023-01-20 - 7:42:15 PM GMT - Time Source: server
-  Document emailed to Rafael Torres-Martinez (rafael.torresm@lumapr.com) for signature  
2023-01-20 - 7:42:16 PM GMT
-  Email viewed by Rafael Torres-Martinez (rafael.torresm@lumapr.com)  
2023-01-20 - 7:43:17 PM GMT
-  Document e-signed by Rafael Torres-Martinez (rafael.torresm@lumapr.com)  
Signature Date: 2023-01-20 - 7:43:28 PM GMT - Time Source: server
-  Document emailed to ricardo.castro@lumapr.com for signature  
2023-01-20 - 7:43:29 PM GMT
-  Email viewed by ricardo.castro@lumapr.com  
2023-01-23 - 12:56:34 PM GMT
-  Signer ricardo.castro@lumapr.com entered name at signing as Ricardo Castro Gómez  
2023-01-23 - 12:58:29 PM GMT
-  Document e-signed by Ricardo Castro Gómez (ricardo.castro@lumapr.com)  
Signature Date: 2023-01-23 - 12:58:31 PM GMT - Time Source: server
-  Agreement completed.  
2023-01-23 - 12:58:31 PM GMT