



Israel Electric Corp. Ltd.  
Generation & Energy Group  
Generation Division  
Chief Chemist Dpt.



Specification No. 679

Version: 05

First Version: 24/11/2009

Valid Since: 12/12/2024

## Technical Specification for Chemicals and similar materials

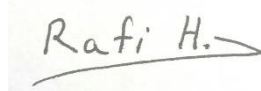
Page 1 of 5

Category: General Purpose Silicone RTV Sealant

Cancels and replaces Specification No. 679 version 04

### IEC Specification

## General Purpose Silicone RTV Sealant

|             | Name            | Date       | Signature                                                                             |
|-------------|-----------------|------------|---------------------------------------------------------------------------------------|
| Updated by  | Efrat Brayer    | 11/12/2024 |  |
| Checked by  | Dr. Rafi Halauí | 12/12/2024 |  |
| Approved by | Pery Shoshani   | 12/12/2024 |  |

**1. Purchaser:** Israeli Electric Corporation (IEC)

**2. Scope**

This specification covers the requirements for a one part, moisture curing, room temperature vulcanizing (RTV) silicone rubber based sealant/adhesive, suitable for adhesion to non porous substrates, such as glass, glazed ceramic and metals.

**3. IEC Catalogue numbers**

| <b>Package<br/>Colour</b> | <b>280-310 ml cartridge</b> | <b>60-100 ml tube</b> |
|---------------------------|-----------------------------|-----------------------|
| White                     | 3332681                     | 426361                |
| Clear                     | 3332673                     | 426387                |
| Black                     | 1186345                     | 425991                |

**4. Physical and Chemical Requirements**

- 4.1 The sealant shall be one part, moisture curing, room temperature vulcanizing (RTV) silicone rubber based sealant/adhesive, suitable for adhesion to non porous substrates, such as glass, glazed ceramic and metals.
- 4.2 The proposed product shall comply with the physical and chemical properties mentioned in table 1 and table 2 (see Appendix No. 1).

**5. Packaging and Marking**

- 5.1. The sealant/adhesive shall be supplied according to the package sizes mentioned in paragraph 3.
- 5.2. Each package shall be legibly and durably marked with at least the following details:
- Product Name
  - Manufacturer's Name
  - Part Number
  - Material description and concentration
  - Net weight or Net volume of package
  - Distinctive lot or batch number

- Date of manufacture
- Safety Marking

5.3. Marking shall be made by stenciling or other similar process and shall be waterproof.

## **6. Quality Assurance**

6.1. The manufacturer shall have ISO 9001 quality management certificate for production of industrial chemicals \*.

6.2. The quality of the product is under the responsibility of the supplier

## **7. Tender Documentation**

The Supplier shall submit with its offer to the tender the following documents in their latest version:

7.1. Manufacturer's Technical Specification (TDS), containing at least, the data required in IEC specification.

7.2. Manufacturer's Safety Data Sheet (SDS).

7.3. Manufacturer's ISO 9001 quality management certificate for production of industrial chemicals \*.

7.4. Certificate of analysis of the sealant from certified laboratory\*\* for tests in this field, containing at least the data required in IEC specification.

7.5. Manufacturer's Part Number (P/N).

## **8. Delivery Documentation**

Each delivery shall be accompanied by the following documents:

8.1 Manufacturer's Technical specification (TDS) of the sealant, containing at least, the data required in IEC Specification.

8.2 Certificate of analysis of the sealant from certified laboratory\*\* for tests in this field, containing at least, the data required in IEC Specification.

8.3 Certificate of Compliance (COC) of the sealant with IEC specification, from certified laboratory\*\* for tests in this field.

8.4 Manufacturer's Safety Data Sheet (SDS) for the sealant

**Remark \***

The date of validity of the certificate and edition of ISO 9001 standard shall be valid on the last date for submission of proposals in the tender.

The certifying body must be accredited by an accreditation body that is a member of International Accreditation Forum Multilateral Arrangement (IAF-MLA).

**Remark \*\***

Certified Laboratory is a laboratory with quality management system which meets with ISO 9001 requirements relevant for laboratory tests and/or laboratory services.

**9. References**

- ASTM D2240 – Standard Test Method for Rubber Property – Durometer Hardness
- ISO 868- Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness)
- ASTM D412 – Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers – Tension
- DIN 53504- Testing of rubber - Determination of tensile strength at break, tensile stress at yield, elongation at break and stress values in a tensile test

## Appendix No. 1: Declaration of the manufacturer

Table No. 1: Declaration Concerning Technical Requirements of Delivery

| Requirement                                                | Yes/No |
|------------------------------------------------------------|--------|
| IEC catalog No. 3332681 Colour: White, Package: 280-310 mL |        |
| IEC catalog No. 3332673 Colour: Clear, Package: 280-310 mL |        |
| IEC catalog No. 1186345 Colour: Black, Package: 280-310 mL |        |
| IEC catalog No. 426361 Colour: White, Package: 60-100 mL   |        |
| IEC catalog No. 426387 Colour: Clear, Package: 60-100 mL   |        |
| IEC catalog No. 425991 Colour: Black, Package: 60-100 mL   |        |

Table No. 2: Technical requirements of proposed product

| Property                                                                  | Requirement  | Manufacturer's Data |
|---------------------------------------------------------------------------|--------------|---------------------|
| Hardness [Shore A] (ISO 868, ASTM D2240 or equivalent)                    | 13 to 30     |                     |
| Application temperature [°C]                                              | 7 to 40      |                     |
| Useful temperature range [°C]                                             | (-40) to 150 |                     |
| Curing rate (20°C-25°C / 50%-65% R.H.) [mm/day]                           | Min. 3       |                     |
| Skin over time [minutes]                                                  | Max. 20      |                     |
| Elongation to break (ASTM D412, DIN 53504 or equivalent) [%]              | Min. 300     |                     |
| Shelf life in original unopened package, at the time of delivery [Months] | Min. 9       |                     |

Name of Manufacturer: \_\_\_\_\_

Signature of the Bidder or Quality Assurance Manager of the Manufacturer: \_\_\_\_\_

Date: \_\_\_\_\_