



The Chemical Company

PRODUCT DATA

9 09 60 00 **Flooring**

# CHEMREX® CX-948

Gun-grade polyurethane adhesive/sealant for carpet tack strips

### Description

CHEMREX® CX-948 is a one-component, high-strength, high-solids, low-VOC polyurethane-based adhesive that is 3 times stronger than conventional adhesives. Its patented technologically advanced formula produces a permanent overnight bond to almost any substrate. Use it in all climates.

### Yield

See page 3 for chart.

### Packaging

313 ml cartridges (24 per case, 44 cases per pallet)

858 ml cartridges (12 per case, 48 cases per pallet)

5 gallon pails (special order only)

55 gallon drums (special order only)

### Color

Light brown

### Shelf Life

Cartridge: 1 year when stored at 75° F (24° C) and 50% relative humidity

Bulk: 9 months when stored at 75° F (24° C) and 50% relative humidity

### Storage

Store in unopened containers in a cool, dry area away from direct sunlight.

Storing at elevated temperatures will reduce shelf life. In cool or cold weather, store containers at room temperature for at least 24 hours before using.

### Features

- VOC compliant
- Low odor

### Strong and versatile

- High solids
- Nonshrinking
- High strength

### Fast curing

- Long open time

### Nonfreezing

- Broad service temperature range

### Installation of carpet tack strip

- Nonflammable
- Contributes to LEED credit, South Coast Bay Area compliant

- AFG-01 approved

### Benefits

Environmentally friendly

Replaces solvent-based adhesives; safe to use indoors or out; no odor complaints

Permanently bonds together almost anything interior or exterior

Provides excellent coverage

Does not crack or lose bond

Stronger than many substrates it joins together; up to 3 times the strength of conventional adhesives

Provides permanent overnight bond

Offers flexibility in repositioning; user friendly

Can be applied to frozen, frost-free lumber

Suitable for use in hot and cold environments

Allows power stretching of carpet in 2 hours

Improves worker safety

Suitable for use in all 50 states

Meets industry standards

### Where to Use

#### LOCATION

- Carpet tack strips
- Stair nosings
- High-solids subfloor adhesive
- Assembly of trucks, cabs and vans
- Interior and exterior
- Above grade

#### SUBSTRATE

- Treated and untreated lumber
- Brick
- Metal
- Concrete
- Masonry
- Most rigid building materials



## Technical Data

### Composition

CHEMREX® CX-948 is a high-solids polyurethane adhesive that cures by reaction with atmospheric moisture.

### Compliances

- Adhesive meets or exceeds all requirements of the American Plywood Association Specification AFG-01, Adhesive for Gluing Plywood to Wood Framing.
- FHA Bulletin UM-60
- ASTM D 3498

### Typical Properties

| PROPERTY                               | VALUE                |
|--|----------------------|
| <b>Viscosity</b> , cps                 | Up to 1,000,000      |
| <b>Solids</b> , %                      | 90                   |
| <b>Working or open time</b> , hrs      | Up to 1              |
| <b>Weight</b> , lbs/gal (kg/L)         | 10.8 (1.30)          |
| <b>Flash point</b> , ° F (° C)         | 250 (121)            |
| <b>Freeze/thaw stability</b>           | Does not freeze      |
| <b>Shrinkage</b>                       | None                 |
| <b>Service temperature</b> , ° F (° C) | Up to 250 (121)      |
| <b>Slab temperature</b> , ° F (° C)    | 50 to 100 (10 to 38) |

### Test Data

#### LAP SHEAR

| PROPERTY                                | RESULTS<br>PSI (MPA) | COMMENTS             |
|---|----------------------|----------------------|
| <b>Chemlite to plywood</b>              | 341 (2.35)           | Plywood failure      |
| <b>Kynar to plywood</b>                 | 340 (2.34)           | Primer 733 on Kynar  |
| <b>Extruded polyurethane to plywood</b> | 240 (1.65)           | 32 minutes tack time |

#### ADHESIVE STRENGTH CHART

| SUBSTRATE   | CHEMREX® CX-948<br>PSI (MPA) |              |
|---|------------------------------|--------------|
|   | 24 hrs                       | 7 days       |
| <b>Plywood to Douglas fir</b>                             | 541 (3.73)                   | 858 (5.91)   |
| <b>Plywood to treated lumber</b>                          | 861 (5.93)                   | 1,000 (6.89) |
| <b>Metal to Douglas fir</b>                               | 313 (2.16)                   | 313 (2.16)   |
| <b>Foam to foam*</b>                                      | 37 (0.25)                    | 37 (0.25)    |
| <b>Oriented strandboard to Oriented strandboard (wet)</b> | 354 (2.44)                   | 544 (3.75)   |
| <b>Wet Douglas fir to metal</b>                           | 217 (1.50)                   | 313 (2.16)   |
| <b>Frozen Douglas fir to frozen Douglas fir</b>           | 360 (2.48)                   | 828 (5.70)   |
| <b>Plywood to F.R.P.</b>                                  | 100 (0.69)                   | 222 (1.53)   |

Note: Average data is from 10 specimens. Wet lumber is from overnight soak.

\*Foam tears apart at 37 psi (0.25 MPa).

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

## How to Apply

### Surface Preparation

1. Surfaces must be structurally sound, dry, clean, and free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, membrane materials or other substances that may affect adhesion.
2. On metal surfaces, remove scale, rust or other coatings to expose a bright white surface. Aluminum window frames are frequently coated with a clear lacquer that must be removed before the application of CHEMREX® CX-948.
3. On concrete or stone, or other masonry surfaces, clean by grinding, sandblasting or wirebrushing to expose a sound surface free of contamination and laitance.
4. On wood surfaces, the surface must be clean and sound. Scrape away paint to bare wood.

### Priming

CHEMREX® CX-948 bonds well to most substrates; however, it is the user's responsibility to check the adhesion of the cured adhesive on specific substrates. For further information, contact Technical Services.

### Application

1. Apply by caulking gun or trowel.
2. Wearing gloves during application is highly recommended. Once material has cured it cannot be removed.
3. Because of the high strength of CHEMREX® CX-948, do not apply it as heavily as you would a conventional adhesive. Cut the smallest possible opening in the spout to render the appropriate-sized bead. Be certain to fill all gaps between materials.

4. Use mechanical fasteners to hold materials in place until adhesive has fully cured.

### Curing

CHEMREX® CX-948 forms a tenacious bond overnight.

|             |             |
|-------------|-------------|
| Firm set:   | 1 – 2 hours |
| Handleable: | 16 hours    |
| Full cure:  | 7 days      |

Above times are based on 75° F (24° C) and 50% relative humidity. Cure time varies with temperature, humidity, and the porosity of the materials joined.

### Clean Up

Clean all tools and equipment immediately after use with xylene, mineral spirits or acetone. Cured material must be mechanically removed.

### Yield

| BEAD SIZE<br>IN (MM) | LINEAL<br>FT/GAL (M/L) | LINEAL FT  |            |
|----------------------|------------------------|------------|------------|
|                      |                        | PER 313 ML | PER 858 ML |
| 1/8 (3)              | 1,569 (126.2)          | 90         | 260        |
| 3/16 (5)             | 697 (56)               | 40         | 120        |
| 1/4 (6)              | 392 (31.5)             | 20         | 67         |
| 5/16 (8)             | 251 (20.2)             | 11         | 30         |
| 3/8 (10)             | 174 (14)               | 6          | 16         |

### For Best Performance

- Wear gloves during application of adhesive; once cured, material cannot be removed.
- Not intended for applications with continuous submersion.
- If adhesion to a substrate is questionable, a test application must be conducted.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

### Health and Safety

CHEMREX® CX-948

#### Warning

CHEMREX® CX-948 contains hydrotreated light petroleum distillate, talc, methylene bisphenyl diisocyanate, polymethylene polyphenyl isocyanate and silicon dioxide.

#### Risks

May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Reports have associated repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations. DO NOT take internally. Keep container closed. Empty container may contain hazardous residues. All label warnings must be observed until container is commercially cleaned or reconditioned.

#### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

#### VOC Content

45 g/L or 0.38 lbs/gal, less water and exempt solvents.

**For medical emergencies only,  
 call ChemTrec (1-800-424-9300).**

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