



The Chemical Company

PRODUCT DATA

DEGABOND™ 948

Gun grade, polyurethane structural adhesive

Description

DegaBond™ 948 is a one-component, high-strength, polyurethane-based structural adhesive that is significantly stronger than conventional latex or water-based adhesives. Its patented formula produces a permanent overnight bond to almost any substrate for use 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: 6 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

- Low VOCs
- Strong and versatile
- High strength
- Fast curing
- Nonflammable

Benefits

- Environmentally friendly
- Permanently bonds together almost anything interior or exterior
- Stronger than many substrates it joins together; up to 3 times the strength of conventional adhesives
- Provides permanent overnight bond
- Improves worker safety

Where to Use

- Trailers
- Trucks
- Truck bodies
- Rail cars
- Containers
- Buses
- Marine
- RV
- Horse trailers
- Manufactured housing
- Emergency vehicles

SUBSTRATES

- Masonary
- Wood
- Metal
- Composition Board
- Concrete
- Gypsum Board

Surface Preparation

1. Surfaces must be 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 DegaBond™ 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.

Technical Data

Composition

DegaBond™ 948 is a one-component polyurethane structural bonding adhesive.

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
Viscosity, cps	Up to 1,000,000
Working or open time, hrs	Up to 1
Weight, lbs/gal (kg/L)	10.8 (1.30)
Freeze/thaw stability	Does not freeze
Service temperature, ° F (° C)	Up to 250 (121)

Test Data

LAP SHEAR

PROPERTY	RESULTS PSI (MPA)	COMMENTS
Composite materials (Kemlite) to plywood	341 (2.35)	Plywood failure
Anodized aluminum to plywood	240 (1.65)	32 minutes tack time

ADHESIVE STRENGTH CHART

SUBSTRATE	DEGABOND™ 948 PSI (MPA)	
	24 hrs	7 days
Plywood to Douglas Fir	541 (3.73)	858 (5.91)
Plywood to treated lumber	861 (5.93)	1,000 (6.89)
Anodized aluminum to Douglas Fir	313 (2.16)	313 (2.16)
Foam to foam*	37 (0.25)	37 (0.25)
Oriented strandboard to Oriented strandboard (wet)	354 (2.44)	544 (3.75)
Wet Douglas Fir to Anodized aluminum	217 (1.50)	313 (2.16)
Frozen Douglas Fir to frozen Douglas Fir	360 (2.48)	828 (5.70)
Plywood to F.R.P.	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.

Priming

DegaBond™ 948 bonds well to most substrates; however, it is strongly recommended to check the adhesion of the cured adhesive on specific substrates. For further information, contact Technical Services.

Application

1. Apply by adhesive/caulk gun.
2. Wearing appropriate personal protection equipment during application is highly recommended. Once material has cured it is difficult to remove.
3. Because of the high strength and slight expansion properties of DegaBond™ 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

DegaBond™ 948 forms a tenacious bond overnight.

Firm set:	1 – 2 hours
Handleable:	16 hours
Full cure:	48 hours

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 the appropriate solvents. Cured material must be mechanically removed.

For Best Performance

- Wear gloves during application; once cured, DegaBond™ 948 is difficult to remove from skin and clothing. If adhesive gets on skin, immediately wipe off with a dry cloth.
- 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.

Yield

BEAD SIZE IN (MM)	LINEAL FT/GAL (M/L)	LINEAL FT PER 313 ML	LINEAL FT 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

Health and Safety

DEGABOND™ 948

Warning

DegaBond™ 948 contains hydrotreated middle petroleum distillate, methylene bisphenyl diisocyanate and polymethylene polyphenyl isocyanate.

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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