



The Chemical Company

#### PRODUCT DATA

## DEGABOND™ 54

High-performance structural adhesive for mechanical fastener replacement

### Description

DegaBond™ 54 is a premium, fast-curing, ready-to-use, one-part structural bonding adhesive. It combines the best qualities of organic and silicone technologies. It accommodates extreme environmental conditions to maintain structural integrity.

### Yield

A 300 mL cartridge provides approximately 24 lineal feet in a 1/4" (6 mm) bead.

### Packaging

300 ml (10.1 fl oz) cartridges,  
24 cartridges per carton

20 oz (590 ml) ProPaks,  
20 ProPaks per carton

2 gallon (7.6 L) pails (special order)

### Color

White, aluminum gray and black

### Shelf Life

9 months when properly stored

### Storage

Store in original, unopened containers in a cool, dry area. Protect unopened containers from heat and direct sunshine. Storing at elevated temperatures will reduce shelf life.

### Features

- High adhesive strength
- Fast curing
- 100% VOC compliant
- Primerless application
- Ready-to-use one component

### Benefits

- Replaces mechanical fasteners
- Speeds production, assembly time
- Environmentally friendly
- Speeds production processes
- Reduces labor; speeds application

### Where to Use

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

### How to Apply

#### Surface Preparation

1. Surfaces must be structurally sound, fully cured, dry, clean and free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust or other substances/contaminants which may affect adhesion or curing.
2. DegaBond™ 54 should be applied directly to the contacting substances for best adhesion and to avoid delamination.
3. Substrates must be sound, well bonded, properly cured and of sufficient depth to comply with manufacturer's specifications.

#### METAL

1. On metal surfaces, remove rust and any loose particles from surface.
2. On prepainted metal, check compatibility and adhesion before applying DegaBond™ 54.
3. Test any coating that cannot be removed to verify adhesion of sealant or to determine an appropriate primer.

#### WOOD

1. New and weathered wood must be clean and sound.
2. Scrape away loose paint to bare wood.
3. Test any coating that cannot be removed to verify adhesion of sealant or to determine an appropriate primer.

Technical Data

Composition

DegaBond™ 54 is a solvent-free formulation based on hybrid polyurethane technology.

Compliances

- ASTM C 920, Type S, Grade NS, Class 35, Use NT, M, A, G, and O
- Federal Specification TT-S-001543A, Type II, Class A, Type Nonsag
- Federal Specification TT-S-00230C, Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- USDA compliant for use in areas that handle meat and poultry
- ASTM C 1382 for use with EIFS wall systems
- 100% VOC compliant

Typical Properties

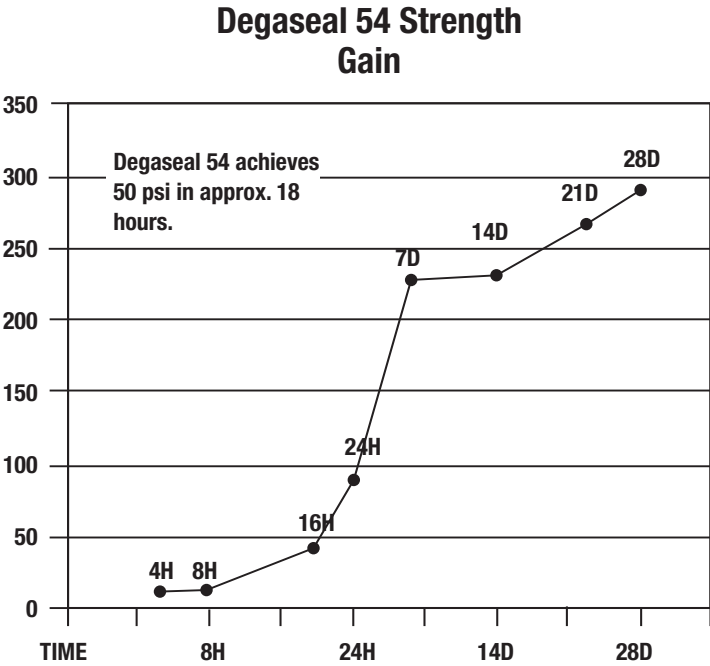
PROPERTY	VALUE
Service temperature range, ° F (° C)	-40 to 220 (-40 to 104)
Expected life	Up to 25 years
Shrinkage	None

Test Data

PROPERTY	RESULTS	TEST METHODS
Lap shear, psi (MPa)	35 (@ 24 hrs)	ASTM D 1002
Tensile strength, psi (MPa)	465 (1.5)	ASTM D 412
Tear strength, lb/in (kg/cm)	101 (7.1)	ASTM D 1004
Ultimate elongation at break, %	890%	ASTM D 412
Hardness, Shore A, at standard conditions	42	ASTM C 661
Tack-free time, min	25 ± 5	ASTM C 679
Skin time, minutes	25 – 40	Industry method
UV Resistance	High	Industry method
Adhesion* in peel, pli (kg/cm), (minimum 5 pli [0.89 kg/cm])		ASTM C 794
Aluminum	42 (6.2)	
Glass	40 (5.8)	
Weathering, Xenon arc, 2,000 hrs	No Degradation	ASTM G 151, G 155

\*Concrete primed with Primer 2000 for water immersion as indicated in ASTM C 920.

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



## Application

1. DegaBond™ 54 creates “rivet-like” adhesion to a wide variety of materials and substrates to establish permanent, high-strength elastic bonds. DegaBond™ 54 is a primerless adhesive/sealant, so no need for special pre-treatments. It bonds extremely well to a wide variety of substrates and is resistant to UV radiation, weather extremes and aging.
2. DegaBond™ 54 comes ready to use. Apply by heavy-duty sealant gun. Do not open cartridges, sausages or pails until preparatory work has been completed.
3. Fill joints from the deepest point to the surface by holding a properly sized nozzle against the back of the joint.
4. Proper tooling ensures the correct bead configuration and a neat joint. Equally important, it ensures maximum adhesion to the sides of the joint. For best results, dry tool. Avoid overtooling of sealant.
5. Best practices dictate that all product application be done when temperatures are above 40° F (4° C) to avoid application to moisture-laden surfaces. Moisture on substrates will adversely affect adhesion. Application may proceed as low as 20° F (-6° C) if there is certainty that substrates are completely dry, free of frost, and clean as described under Surface Preparation.

## Clean Up

Immediately after use, clean equipment with the appropriate solvent. Use proper precautions when handling solvents. Remove cured sealant by cutting with a sharp-edged tool. Remove thin films by abrading.

## Curing Time

The cure of DegaBond™ 54 varies with temperature and humidity. The following times assume 75° F (24° C), 50% relative humidity and a joint 1/2" (13 mm) in width by 1/4" (6 mm) in depth.

Skins: within 1 hour

Functional: within 24 hours

Full cure: approximately 1 week

## For Best Performance

- In cool or cold weather, store container at room temperature for at least 24 hours before using.
- Do not allow uncured DegaBond™ 54 to come into contact with alcohol-based materials or solvents.
- Do not allow DegaBond™ 54 to come into contact with oil-based caulking, silicone sealants, polysulfides or fillers impregnated with oil, asphalt or tar.
- DegaBond™ 54 should not be used for continuous immersion in water. Contact Technical Service for recommendations.
- Do not apply over freshly treated wood; treated wood must have weathered for at least six months.
- Lower temperature and humidity will extend curing times.
- DegaBond™ 54 can be painted over after a thin film or skin forms on the surface.
- 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

DEGABOND™ 54

### Caution

DegaBond™ 54 contains no harmful chemicals as defined by OSHA or WHMIS.

### Risks

May cause skin, eye and respiratory irritation. Ingestion may cause irritation.

## Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Use only with adequate ventilation. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or product is used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

### 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.

### Proposition 65

This product contains material listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

### VOC Content

0.02 lbs/gal or 2.5 g/L, less water and exempt solvents.

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

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