



Automotive Systems

DOW Automotive systems

Is the worldwide leader in polyurethane glazing.

BETASEALTM

Adhesives for structural bonding of glazing surfaces.

BETAMATETM

Structural adhesives to bond different substrates.

BETAFILLTM

Seam sealants and solvent free sealants with permanent elasticity.

BETAPRIMETM

Glass and body primers to enhance activation of the bonding.

BETACLEANTM

Glass and body cleaners.

BETAWIPETM

Adhesion promoters for different substrates.

BETABRADETM

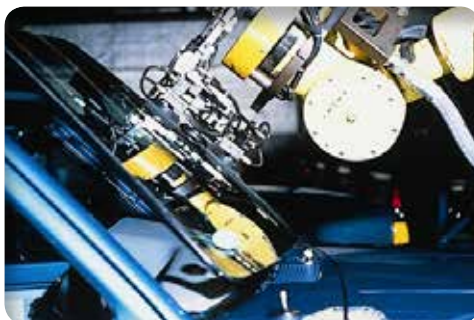
Is an abrasive liquid to remove silicon from contaminated Windscreens without scratching the glass.

www.dowautomotive.com

POLYURETHANE ADHESIVES AND SEAM SEALANTS



DOW automotive systems developed the first direct-glazing adhesive system more than 40 years ago.



CLEANERS

Product Description	Product N°	UOM (Unit Of Measure)
BETACLEAN 3300 Non-smearing sprayable cleaner for glass, ceramic frit, encapsulations, (PUR-RIM, PVC) and polyurethane pre-applied adhesive systems (PAAS).	24100119 24100377 24100209	8ml wet/dry tissue 5ltr Pail 25ltr Pail
BETACLEAN 3350 Heptane based cleaner, for quick removal of contaminants, dirt and grease from bare & treated metals, paints & plastics.	24100361 24100024	125ml Bottle 1000ml Bottle
BETACLEAN 3900 Isopropanol based cleaner, for quick removal of contaminants, dirt and grease from paint finishes, plastics & composites.	24100105	1000ml Bottle
BETABRADE F1 Specially formulated paste for the fast and easy removal of Silicone and other heavy contamination from vehicle glass.	24100070	500ml Bottle

ACTIVATORS

BETAWIPE 4000 Adhesion promoter for pre-applied sealant surfaces or various plastic substrates prior to the application of BETASEAL* direct glazing or BETAMATE* structural adhesives.	24100359	250ml Bottle
BETAWIPE VPO4604 Adhesion promoter for improved cross-linking of various substrate surfaces, including glass, aluminium and a variety of plastics, prior to the application of BETASEAL* direct glazing or BETAMATE* structural adhesives.	24100021 24100007	15ml Bottle 250ml Bottle

PRIMERS

Product Description

Product N°

UOM (Unit Of Measure)

BETAPRIME 5404

Used to prepare and create optimum bond conditions for Plastics, composites and painted substrates in preparation for the application of BETASEAL* glass bonding systems or BETAMATE* structural adhesives.

24100302
24100029
24100046

15ml Bottle
100ml Bottle
250ml Bottle

BETAPRIME 5500

Used to prepare and create optimum bond conditions for Glass, ceramic frit and some painted substrates in preparation for the application of BETASEAL* glass bonding systems or BETAMATE* structural adhesives.

24100060
24100097
24100027

15ml Bottle
100ml Bottle
250ml Bottle

BETAPRIME 5061

Multi-function primer for the preparation of a wide variety of substrates, to include Glass, ceramic frit, polycarbonates, composites and painted substrates, in preparation for the application of BETASEAL* glass bonding systems or BETAMATE* structural adhesives.

24100033
24100059

100ml Bottle
250ml Bottle

BETAPRIME 1707

2-Part 'anti corrosion' metal etch primer, for preparation and protection of bare metal substrates, including aluminium and steel. Superior performance for applications prone to exterior conditions & weathering. For use with BETASEAL* glass bonding systems or BETAMATE* structural adhesives

24100183

160ml container set



ADHESIVES (1-Component)

Product Description	Product N°	UOM (Unit Of Measure)
BETAFILL 10210/10211/10215 Factory-standard seam and panel sealing, gap filling and panel bonding. Available in a variety of colours, which are over paintable with most systems, the one component moisture curing polyurethane sealant provides permanent elasticity and good adhesion to a variety of different substrates, usually without the need for primers.	24100004 24100014 24100020 24100192 24100057 24100035	‘WHITE’ 310ml cartridge ‘WHITE’ 600ml sausage ‘GREY’ 310ml cartridge ‘GREY’ 600ml sausage ‘BLACK’ 310ml cartridge ‘BLACK’ 600ml sausage
BETALINK 1102 Specified by commercial vehicle OEMs worldwide. Formulated to bond and seal various materials used in the bus, truck, rail and industrial vehicle markets, BETALINK 1102 can be applied to a variety of common substrates, including Sheet and coated metal, Aluminium, Stainless steel, wood, painted surfaces and most plastics and composites.	24100116	‘WHITE’ 600ml sausage
BETAMATE 7120 High performance, high strength (9Mpa) Polyurethane adhesive with excellent elasticity and a generous working time. Superior ‘UV’ performance allows the bonding and sealing of internal and external glazing, panels and sub-structures. With ‘Rail’ approvals, this versatile adhesive lends to a wide range of applications, including Train, Bus and commercial vehicle markets.	24100050 24100043	300ml cartridge 600ml sausage
BETAMATE 7185 High performance polyurethane adhesive which can be warm applied, providing ‘quick-fix’ function. Quick fix offers a high green strength/sag resistance, giving bonded parts an instant grab, allowing products to be moved and processed faster. Ideal for the fixation of commercial vehicle direct glazing, roof, panel and floor assemblies.	24100243	600ml sausage

BETASEAL

New generation, one-component high strength polyurethane adhesive. Low/non-conductive and fast link up properties allow for short drive away and fixation of safety critical, structural components .Including windshield and side glass, body panels, roof and floor systems. Range of working and handling times, ensures versatility across production and aftermarket applications.

PRODUCT	WORKING TIME	SDAT (SAFE DRIVE AWAY)	PART N°	UOM
BETASEAL 1407	15 MINUTES	4 HOURS	24100066	310ML CARTRIDGE
			24100073	600ML SAUSAGE
BETASEAL 1507	15 MINUTES	2 HOURS	24100072	310ML CARTRIDGE
			24100073	600ML SAUSAGE
BETASEAL 1580	8-15 MINUTES	30 MINUTES	24100372	310ML CARTRIDGE
			24100328	600ML SAUSAGE
BETASEAL 1590CT	15-25 MINUTES	2 HOURS	24100402	600ML SAUSAGE



ADHESIVES (2-Component)

BETAMATE 2810

Structural adhesive from Dow Automotive is specified by transportation industry OEMs worldwide. Formulated for Automotive OEM car manufacturers & commercial vehicle applications in the bus, truck, rail and industrial vehicle markets. BETAMATE 2810 is designed for composites, carbon fibre, plastics, laminates and paints after Pre-treatment. Its high G modulus improves the vehicle's torsional body stiffness, as the two-component BETAMATE 2810 system is not reliant on humidity for curing.

Additional benefits include:

- Bonding of dissimilar substrates
- Material flexibility that allows for thermal expansion and contraction within a joint, without loss of integrity
- Improved total stiffness of body structure
- Decreased production times

Available with a range of working times and cure rates, to suit applications, from small component parts to large vehicle panels and structures.

DESCRIPTION	BETAMATE 2810 SV	BETAMATE 2810 MV	BETAMATE 2810 LV
PART NUMBER	24100351	24100370	24100395
UOM	580ml set	580ml set	580ml set
SAG RESISTANCE	very good	good	good
OPEN TIME	4-6 min.	8-10 min.	10-15 min.
HANDLING STRENGTHS (0.25 Mpa)	~ 20 min	~ 40 min	~ 60 min
TENSILE STRENGTH	~ 8 MPa	~ 7 MPa	~ 7 MPa
ELONGATION AT BREAK	~ 230 %	~ 230 %	~ 230 %
SHEAR STRENGTH	~ 6 MPa @ 2mm	~ 6 MPa @ 2mm	~ 6 MPa @2mm
G-MODULUS	4-5 MPa	5 MPa	5 MPa
SUBSTRATES	Steel (e-coat)/PP GF (flame treated) Aluminum/PP GF PP GF/PP TF (flame treated) PP GF/ PC (flame treated) Steel (e-coat)/SMC	Steel (e-coat)/PP GF (flame treated) Aluminum/PP GF PP GF/PP TF (flame treated) PP GF/ PC (flame treated) Steel (e-coat)/SMC	Steel (e-coat)/PP GF (flame treated) Aluminum/PP GF PP GF/PP TF (flame treated) PP GF/ PC (flame treated) Steel (e-coat)/SMC

BETAFORCE 2K polyurethane plastics and composite bonding

Advanced 2- component polyurethane adhesive technology portfolio, tailor made for hybrid and dissimilar material bonding. High performance, structural adhesives facilitate lightweight construction, noise dampening, fuel efficiency and sustainability of Automotive, commercial and industrial vehicles.

Excellent impact resistance and enhanced flexibility for crash durability, offers solutions for bonding applications in trim shop, body shop and general production environments.

Applications include:

- Structural roof and body assemblies
- Tail gate and door systems
- Hybrid composite modules
- Fender, spoiler and chassis to panel fixing

Differentiated Product Properties

- Robust material properties over wide temperature range
- Long term durability of bond assembly
- Combination of high modulus, high tensile strength as well as high elongation at break
- Robust substrate bonding (SMS, CFRP etc.) for hybrid materials assembly
- Pre-treatment solutions for difficult substrates
- Corrosion protection for dissimilar metal bonding
- Good sealing properties
- Tailor made curing times for optimized processes
- Room temperature curing as well as accelerated curing options (oven, IR and induction heating)

Available with a range of working times and cure rates, to suit applications, from small component parts to large vehicle panels and structures.

BETAFORCE 2850

Structural strength, high modulus, semi and fast room temperature cure adhesive. For hybrid applications, where bigger differences are expected in the thermal expansion of dissimilar materials and long/short open time is required. Capability to reduce curing time significant by heat (Induction cure). Blend of high modulus/ high strength and high elongation

DESCRIPTION	BETAFORCE 2850L	BETAFORCE 2850 S
PART NUMBER	24100399	24100398
PACKAGING	580ml set	580ml set
SAG RESISTANCE	very good	very good
OPEN TIME	35 min.	4-6 min.
HANDLING STRENGTHS (0.25 MPa)	~ 90 min	~ 35 min
TENSILE STRENGTH	~ 10 MPa	~ 10 MPa
ELONGATION AT BREAK	~ 150 %	~ 150 %
SHEAR STRENGTH	~ 8 MPa	~ 8 MPa
G-MODULUS	9 MPa	9 MPa
SUBSTRATES	e-coated steel/ e-coated alu CFRP/e-coated steel CFRP/e-coated alu CFRP/ CFRP SMC/e-coated alu SMC/ -coated steel PP GF (flamed) / e-coated steel	E-coated steel/ e-coated alu CFRP/e-coated steel CFRP/e-coated alu CFRP/ CFRP SMC/e-coated alu SMC/ -coated steel PP GF (flamed) / e-coated steel

ADHESIVES (2-Component)

BETAFORCE 9050

High structural, high modulus, slow, medium and fast room temperature cure adhesive, where bigger differences are expected in the thermal expansion of dissimilar materials and medium/short open time is required. Capability to reduce curing time significant by heat (Induction cure). Primer less on FRP and e-coat possible.

DESCRIPTION	BETAFORCE 9050 L	BETAFORCE 9050 S
PART NUMBER	24100397	24100396
PACKAGING	580ml set	580ml set
SAG RESISTANCE	good	good
OPEN TIME	40 min.	6-9 min.
HANDLING STRENGTHS (0.25 MPA)	~ 50 min	~ 25 min
TENSILE STRENGTH	~ 18 MPa	~ 18 MPa
ELONGATION AT BREAK	~ 70 %	~ 70 %
SHEAR STRENGTH	~ 17 MPa	~ 17 MPa
G-MODUL	270 Mpa	300 Mpa
SUBSTRATES	CFRP/e-coated steel CFRP/e-coated alu CFRP/ CFRP SMC/e-coated alu SMC/ SMC	CFRP/e-coated steel CFRP/e-coated alu CFRP/ CFRP SMC/e-coated alu SMC/ SMC

Product Description

Product N°

UOM (Unit Of Measure)

BETAMATE 2098

24100382

2k 'single' cartridge 195ml

BETAMATE™ 2098 is a high performance structural adhesive, which delivers greater crash durability and higher lap shear and dynamic impact strength, matching the performance of structural bonding adhesives used by OEMs. It is an important advancement in auto repair at a time when structural bonding is becoming increasingly common in new vehicles.

Advantages:

- Higher impact strength performance.
- Increased crash durability.
- Greater heat-induction cure possibilities.
- Higher performance especially at sub-zero temperatures.

And, as with all crash-durable adhesives from Dow Automotive:

- Excellent corrosion protection in gaps and flanges.
- Adhesion to most metals and alloys.
- Weld-through ability – within one hour.
- Improved body stiffness and safety performance. Makes body repair faster and easier
- Fast curing performance.
- Little preparation required.
- Adhesion to a wide range of base substrates.
- Easy to apply with any type of dispenser.
- Profile stable after extrusion.
- Working time nearly 1.5 hours.

TOOLING

Range of application equipment available to suit our adhesive systems, including battery, mains, air and manual equipment.

PART NUMBER	1-COMPONENT EQUIPMENT	TO SUIT
10700005	Manual heavy duty cartridge applicator	310ml cartridge
10700006	Manual heavy duty sachet applicator	600ml foil sausage
10700009	PC Cox pneumatic cartridge applicator (AIRFLOW 1)	310ml cartridge
10700013	PC Cox pneumatic sachet applicator (AIRFLOW 1)	600ml foil sausage
25200037	Milwaukee Li-ion M18 PCG battery applicator	310ml cartridge
25200036	Milwaukee Li-ion M18 PCG battery applicator	400/600ml sausage
PART NUMBER	2-COMPONENT EQUIPMENT	TO SUIT
24100364	BETAPOWER II 2K pneumatic applicator	580ml set (Betamate 2810 & Betaforce)
24100363	BETAGUN III 2K pneumatic applicator	580ml set (Betamate 2700 & X2500 only)

Above details popular tools. Large range of applications guns available to suit other materials please contact us with your requirements.

CONSUMABLES

PART NUMBER	DESCRIPTION
25200006	Wire mounted primer applicator felt
25200001	Round applicator felt to suit orange cap
25200000	Orange applicator cap to suit 100ml bottle
24100379	100ml plastic applicator bottle
25200002	50mm felt block primer application pad
25200010	SLIG Hand cleaner 250ml tube

Above details popular consumables. Wider range of accessories available please contact us with your requirements.