

# Henkel Industrial Solutions Adhesives Selector Guide



Excellence is our Passion



**A**t Henkel Corporation, we provide solutions to industry's biggest challenges. We are dedicated to understanding the markets we serve and developing partnerships that stand the test of time.

**O**ur complete line of general industrial adhesives allows manufacturers the ability to bond a variety of different substrates under a wide range of process and environmental parameters. We offer a wide variety of products that can be applied by brush, roller coating, spray and even as contact cements to fit your specific assembly process. Our formulating chemists and scientists have developed product solutions that save weight, time, energy and process complexity.

**T**o help you compete in today's challenging manufacturing environment, our chemists and engineers work in partnership with our customers to improve design, assembly, productivity and profitability. Whether you need consultation on our products' performance or a turnkey process design, Henkel provides solutions.

### *Henkel Brands*

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**Adhesin**<sup>®</sup>

**B**eginning in the 1940s, Adhesin<sup>®</sup> branded adhesives have represented a full range of water-based adhesives for various market segments and applications in the packaging industry. Adhesin<sup>®</sup> adhesives include homopolymers and copolymers dispersions and natural-based products: polyvinyl acetate (PVAc), polyvinyl alcohol (PVOH), and starch dispersion mixture, natural rubber, acrylic water-based adhesive, cellulose ester and cellulose.



**T**he brand name Dorus<sup>®</sup> (an acronym of the founder's grandson's name Doktor Rudolf Schieber) was registered in 1935, and includes adhesives and systems for the woodworking and furniture industry. Dorus<sup>®</sup> branded adhesives include hot melts (PUR, PO, PA, EVA); 3D dispersions (PU), dispersions (PVAc, EVA) and urea resin glues; one- and two-component reactive adhesives (PU); and solvent-based adhesives.

**Macroplast**<sup>®</sup>

**O**riginally launched in 1967, these structural and semi-structural adhesives are used in the manufacture of industrial goods and attributes for the cable industry. Macroplast<sup>®</sup> branded products include one- and two-component polyurethanes (PU), PU elastomers, PU hot melts, one- and two-component epoxy, and solvent-based contact adhesives and cleaners.

**PURmelt**<sup>®</sup>

**O**riginally launched in 1989, Purmelt<sup>®</sup> reactive polyurethane hot melts are used in a wide range of high-end assembly bonding applications.

**technomelt**<sup>®</sup>

**F**irst introduced into industrial assembly applications in 1975, Technomelt<sup>®</sup> branded hot melts have been used for consumer packaged goods and general industrial applications. These hot melt adhesives are thermoplastic 100% solids, non-reactive conventional technology, and have open times ranging from short to permanent pressure sensitive.

**T**his selector guide will aid you in choosing the right solution and product for a wide range of common industrial challenges. For additional information on Henkel products, please contact us at 1.800.562.8483.

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# Hot Melt Adhesives

## POLYOLEFIN

### NON-REACTIVE

Polyolefin hot melts are often the best option for bonding low energy substrates. Henkel's products are formulated with a wide range of open times and tack levels for use in industrial processes.

**Dorus® MS 3210™** – A long open time, sprayable adhesive with good heat-resistance. Preferred to bond fabrics, foams, cloth-backed vinyls to various board stocks and plastics. It is widely used to bond fiberglass to metal in the assembly of HVAC units. Meets several UL® standards including UL® 723 Class 1 for smoke and flame spread, UL® 2395, and UL® 727.

**Technomelt® Q-4222™** – An assembly adhesive with high temperature creep resistance for the air filter industry.

**Technomelt® Q-84-8890™** – Exhibits excellent adhesion to painted metal. Available in bulk containers for high volume processes.

**Technomelt® Q-4206™** – A general assembly adhesive primarily designed for use in air filter assembly. Good temperature resistance.

Products	Order Item Number	Package Type	Adhesive Type	Viscosity, cps	Softening Point
Dorus® MS 3210™	1222948	Box	Hot Melt Polyolefin	10,000 @ 137°C	135°C
Technomelt® Q-4206™	554668	Box	Hot Melt Polyolefin	10,000 @ 180°C	118°C
Technomelt® Q-4222™	266079	Sack	Hot Melt Polyolefin	8,100 @ 180°C	160°C
Technomelt® Q-84-8890™	1348378	Drum	Hot Melt Polyolefin	6,200 @ 177°C	155°C



# Hot Melt Adhesives

## RUBBER

### PRESSURE SENSITIVE

Thermoplastic rubber-based hot melts are often used for permanent bonding of dissimilar materials in a variety of environments. Henkel's products are available in bulk form for extrusion or spray application.

**Technomelt® PS 80-8697™** – General-purpose PSA hot melt designed for use in pre-applied applications. Good adhesion to a variety of substrates including plastics.

**Technomelt® 2787™** – Available in slat form, and originally designed for bonding PET. Broad temperature performance is the key attribute.



**Technomelt® 8848™** – Designed for foam-in-place gasketing for filter application, this adhesive exhibits superior foam structure at density reduction levels of >50% when using the proper equipment.

**Primamelt™ 5646™** – High cohesive and shear resistance with excellent adhesion to steel. Used in bonding abrasive papers, the product also has good heat resistance.

**Technomelt® 5621™** – General PSA for construction and labeling applications.

**Technomelt® 8668™** – High performance PSA with high peel and shear values. It has aggressive tack and good green strength for general assembly applications.

**Technomelt® 86-8845™** – Permanent PSA hot melt designed as an aggressive high performance assembly system. High heat resistance and good peel and shear resistance.

Products	Order Item Number	Package Type	Adhesive Type	Viscosity, cPs	Softening Point
Technomelt® 80-8697™ 	621750	Box (chubs)	Hot Melt PSA	8,000 @ 177°C	118°C
	514533	Drum	Hot Melt PSA	8,000 @ 177°C	118°C
Technomelt® 2787™	1217459	Box	Hot Melt PSA	3,750 @ 177°C	90°C
	1469016	Drum	Hot Melt PSA	3,750 @ 177°C	90°C
Technomelt® 8848™	1351009	Box	Hot Melt PSA	2,100 @ 135°C	93°C
	1059364	Drum	Hot Melt PSA	2,100 @ 135°C	93°C
Primamelt™ 5646™	748024	Drum	Hot Melt PSA	14,000 @ 177°F	121°C
Technomelt® 5621™	1415507	Box	Hot Melt PSA	5,000 @ 177°C	115°C
Technomelt® 8668™	1399958	Box	Hot Melt PSA	18,000 @ 190°C	140°C
	553304	Drum	Hot Melt PSA	18,000 @ 190°C	140°C
Technomelt™ 86-8845™ 	1399961	Box	Hot Melt PSA	18,000 @ 177°C	104°C
	884580	Drum	Hot Melt PSA	18,000 @ 177°C	104°C

 Listed on and complies with the Canadian Domestic Substances List



## Hot Melt Adhesives POLYURETHANE

### POLYURETHANE

Henkel is a global leader in the design and formulation of reactive polyurethane hot melts. These adhesives impart high green strength upon assembly and post-cure with atmospheric moisture to create strong thermoset bonds.

**Purmelt® QR-862A™** – This product is designed to provide highly aggressive tack, combined with very fast handling strength. It is formulated with patented technology to provide fast cure and contains UV dye for improved visibility under ultraviolet source.

**Purmelt® QR-834A™** – This product is designed to provide highly aggressive tack, combined with very fast handling strength. It is formulated with patented technology to provide fast cure and contains color for improved visibility.

**Purmelt® QR-798A™** – Designed for immediate handling strength, fast setting speed, and good deflection-resistance. It is colored for improved visibility.

**Purmelt® QR-004A™** – Designed for high speed production lines and other applications demanding high green strength and fast set speed. Purmelt® QR-004A™ is designed to have good adhesion to vinyl, HPL, wood, phenolic paper, aluminum, etc.

**Purmelt® QR-7799™** – A 100%-solids, aliphatic moisture-curing hot melt adhesive designed to provide high UV stability with fast setting speed.

**Purmelt® QR-913A™** – This product has become the industry standard for trouble-free machining and runs cleanly at a low application temperature. Contains UV dye for improved visibility under a UV source.

**Purmelt® R-633™** – A fast-setting, very high green strength adhesive with short open time. Provides excellent adhesion to synthetic materials, rubber and foam. Not recommended for roll coating..

**Purmelt® R-508B™** – Designed to give aggressive tack, short to medium open time and high green strength. It can also be used to laminate and assemble soft plastics and other flexible substrates.

**Purmelt® R-508™** – Can be used for lamination and assembly of sandwich panel elements of wood, lauan, fiberboard, particleboard, plywood, FRP, EPS foam, PU foam and surface-treated metals. It can also be used to laminate and assemble soft plastics and other flexible substrates.

**Purmelt® QR-513C™** – Lamination adhesive for sandwich panels. Designed to have excellent balance of tack, long open time and high green strength.

**Purmelt® QR-5003™** – Designed for fast set bonding, Purmelt® QR-5003™ has good adhesion to a variety of substrates. In many cases, it produces substrate destructive bonds.

Products	Order Item Number	Package Type	Adhesive Type	Viscosity, cPs	Color
Purmelt® QR-862A™	1265054	Drum	Polyurethane Hot Melt	12,000 @ 135°C	Natural
Purmelt® QR-834A™	1223175	Drum	Polyurethane Hot Melt	11,000 @ 135°C	Purple
	1329809	Drum			
	1223174	Drum			
	1223178	Pail			
Purmelt® QR-798A™	1223169	Pail	Polyurethane Hot Melt	13,000 @ 121°C	Purple
	1223170	Drum			
Purmelt® QR-004A™	1216029	Drum	Polyurethane Hot Melt	10,000 @ 121°C	Natural
	1219416	Pail			
Purmelt® QR-7799™	1219481	Pail	Polyurethane Hot Melt	15,000 @ 121°C	Natural
	1219480	Drum			
Purmelt® QR-913A™	1223191	Pail	Polyurethane Hot Melt	12,000 @ 121°C	Natural
	1223189	Drum			
Purmelt® R-633™	1153895	Pail	Polyurethane Hot Melt	48,000 @ 130°C	Natural
Purmelt® R-508B™	627977	Pail	Polyurethane Hot Melt	12,000 @ 121°F	Natural
Purmelt® R-508™	840433	Pail	Polyurethane Hot Melt	12,000 @ 121°F	Natural
	542663	Drum			
Purmelt® QR-513C™	542817	Pail	Polyurethane Hot Melt	12,000 @ 121°F	Natural
	515272	Drum			
Purmelt® QR-5003™	1506162	Drum	Polyurethane Hot Melt	5,000 @ 121°C	Natural

# Hot Melt Adhesives

## CLEANERS

### REACTIVE

Reactive polyurethane hot melts must be cleaned from equipment nozzles, lines, and pumps during extended process downtime. We provide hot melt cleaners in a variety of packages to flush the unused adhesive from bulk hot melt equipment.

**Purmelt® Cleaner 3180™** – Hot melt cleaner for removing uncured Purmelt® product from hot melt processing equipment. Packaged for bulk systems.

**Purmelt® Cleaner 2™** – Hot melt cleaner for removing uncured Purmelt® product from hot melt processing equipment. Blue colored for better identification.

Products	Order Item Number	Package Type	Product Type	Viscosity, cPs	Color	Open Time
Purmelt® Cleaner 3180™	1217501	Drum	HM Equipment Cleaner	12,000 @ 121°C	Natural	7-8 minutes
	1217500	Pail	HM Equipment Cleaner	12,000 @ 121°C	Natural	5 minutes
Purmelt® Cleaner 2™	245517	Sack	HM Equipment Cleaner	6,500 @ 130°C	Blue	N/A

# Solvent-Based Adhesives

## RUBBER

### NON-REACTIVE

Henkel offers solvent-based contact adhesives for specialty assembly operations requiring very fast drying and quick set speeds as seen in water-resistant wood, countertop, and carpet lamination in marine applications.

**Dorus® S 514M™** – HAPS-free, solvent-based contact cement with fast drying and good heat resistant bonds. Spray grade for use in bonding foam and textiles in marine interior assembly applications.

**Macroplast® B 7663G™** – A flammable, synthetic, rubber-based adhesive formulated for bonding a variety of porous and non-porous surfaces. Bonds a variety of surfaces such as foams, fabrics, carpet, metals, wood, plastics, and others. Green in color.

**Macroplast® B 7663™** – A flammable, synthetic, rubber-based adhesive formulated for bonding a variety of porous and non-porous surfaces. Bonds a variety of surfaces such as foams, fabrics, carpet, metals, wood, plastics, and others. Natural in color.

Products	Order Item Number	Package Type	Adhesive Type	Available Color	% Solids	Viscosity, cPs @ 72°F
Dorus® S 514M™	1059671	Pail	Solvented Contact Adhesive	Natural	38	275
	854326	Drum				
Macroplast® B 7663G™	1059668	Pail	Solvented Contact Adhesive	Green	38	275
Macroplast® B 7663™	749962	Drum	Solvented Contact Adhesive	Natural	38	275



# Polyurethane Adhesives

## ONE-PART LIQUIDS

### MOISTURE CURED

Panel assembly is now even easier with the new Macroplast® UR-8340™ series of one-component moisture cure urethane adhesives – our next generation alternative to the industry standard SIA-110™ series. Improvements include better wet-out of the adhesive on multiple surfaces and higher bond strength on aluminum and other metals.

**Macroplast® UR-8225 Slow™** – Can be used for lamination of sandwich panel elements of wood, luan, fiberboard, particleboard, plywood, FRP, EPS foam, PU foam, or metals. Requires clamping or press.

**Macroplast® UR-8331™** – Shows excellent adhesion to PVC and ABS substrates in flat panel lamination. Replacement for solvent-based MCUs currently sold by competitors. Also used for panel lamination of wood, luan, fiberboard, particle board, plywood, FRP, EPS foam, PU foam, and primed metals.

**Macroplast® UR-8340™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Slow cure speed. Natural color version.

**Macroplast® UR-8340RD™** – Red colored, high strength, thermoset liquid moisture cure adhesive for panel lamination. Slow cure speed.

**Macroplast® UR-8341™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Slow cure speed.

**Macroplast® UR-8343™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.

**Macroplast® UR-8343RD™** – Red colored, high strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.

**Macroplast® UR-8344™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.

**Macroplast® UR-8344RD™** – Red colored, high strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.

**Macroplast® UR-8345™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.

**Macroplast® UR-8345RD™** – Red colored, high strength, thermoset liquid moisture cure adhesive for panel lamination. Medium cure speed.













**Macroplast® UR-8346™** – High strength, thermoset liquid moisture cure adhesive for panel lamination. Fast cure speed.

**Macroplast® UR-8346RD™** – Red colored, high strength, thermoset liquid moisture cure adhesive for panel lamination. Fast cure speed.



# Polyurethane Adhesives

## ONE-PART LIQUIDS

Products	Order Item Number	Package Type	Adhesive Type	Available Colors	Viscosity, cPs @ 72°F	Open Time
Macroplast® UR-8225 Slow™ 	515542	Drum	1K Liquid PUR	Natural	8,500	10 minutes
Macroplast® UR-8331™ 	1162784	Pail	1K Liquid PUR	Natural	12,000	50 minutes
	1162477	Drum				
Macroplast® UR-8340™ 	1252520	Pail	1K Liquid PUR	Natural	5,000	110 minutes
	1252515	Drum				
Macroplast® UR-8340RD™ 	1358591	Pail	1K Liquid PUR	Red	5,000	38 minutes
	1358594	Drum				
Macroplast® UR-8341™ 	1252534	Pail	1K Liquid PUR	Natural	5,000	38 minutes
	1252532	Drum				
Macroplast® UR-8343™ 	1252539	Pail	1K Liquid PUR	Natural	5,000	22 minutes
	1252538	Drum				
Macroplast® UR-8343RD™ 	1338865	Pail	1K Liquid PUR	Red	5,000	22 minutes
	1338866	Drum				
Macroplast® UR-8344™ 	1252541	Pail	1K Liquid PUR	Natural	5,000	13 minutes
	1252540	Drum				
Macroplast® UR-8344RD™ 	1338868	Pail	1K Liquid PUR	Red	5,000	13 minutes
	1338867	Drum				
Macroplast® UR-8345™ 	1252545	Pail	1K Liquid PUR	Natural	5,000	12 minutes
	1252543	Drum				
Macroplast® UR-8345RD™ 	1338861	Pail	1K Liquid PUR	Red	5,000	12 minutes
	1338870	Drum				
Macroplast® UR-8346™ 	1252548	Pail	1K Liquid PUR	Natural	5,000	7 minutes
	1252546	Drum				
Macroplast® UR-8346RD™	1338030	Pail	1K Liquid PUR	Red	5,000	6 minutes
	1338031	Drum				

 Listed on and complies with the Canadian Domestic Substances List



# Water-Based Adhesives

## ACRYLICS, RUBBER AND POLYURETHANE



**Adhesin**

### ACRYLIC NON-REACTIVE

**Dorus® PL-452A™** – An outstanding water-based pressure sensitive adhesive suitable for bonding fibrous glass, jute, and other types of lightweight insulation to ductwork and to housings for air conditioning units and furnaces. Complies with UL® 2395 and UL® 727, and exhibits a 0/0 flame spread and smoke rating.

**Bondmaster® 40-514A™** – Water-based pressure sensitive adhesive suitable for bonding fibrous glass, jute, and other types of lightweight insulation to ductwork and to housings for air conditioning units and furnaces. Tinted blue in color to allow better visual inspection and control of application.

**SA-9627™** – General pressure sensitive acrylic for bonding plastics. High tack and high solids offer quick processing and adhesion to many substrates.

Products	Order Item Number	Package Type	System Media Carrier	Product Type	Available Colors	Product Base	Viscosity, cPs	% Solids
<b>Dorus® PL-452A™</b>	1218381	Drum	Water-based	Pressure Sensitive	Natural	Acrylic	300	65
	1218380	Pail	Water-based	Pressure Sensitive	Natural	Acrylic	300	65
<b>SA-9627™</b>	908362	Drum	Water-based	Pressure Sensitive	Natural	Acrylic	2,000	60
<b>Bondmaster® 40-514A™</b>	1218400	Pail	Water-based	Pressure Sensitive	Blue	Acrylic	300	65
	1218399	Tote						

### POLYURETHANE SELF-REACTIVE

**Dorus® ND-4100™** – A high performance, heat reactivatable, one-component polyurethane adhesive for tough elastomeric bond applications. Light gray in color, this adhesive requires heat and pressure for application such as a vacuum press.

**Permattach 395HC™** – A high performance, heat reactive, one-component polyurethane adhesive for tough elastomeric bond applications for use in bonding rubber to leather uppers in footwear.

Products	Order Item Number	Package Type	Product Type	Available Colors	Product Base	Viscosity, cPs	% Solids
<b>Dorus® ND-4100™</b>	1505588	Drum	Specialty Laminating Adhesive	Light Grey	Polyurethane Dispersion	400	40
	1440306	Pail					
<b>Permattach 395HC™</b>	854328	Pail	Specialty Laminating Adhesive	Natural	PCP Rubber	5,000	40

# Product Index

40-514A™	Bondmaster® 40-514A™	8	S 514M™	Dorus® S 514M™	5
80-8697™	Technomelt® 80-8697™	3	SA-9627™	SA-9627™	8
86-8845™	Technomelt® 86-8845™	3	UR-8225 Slow™	Macroplast® UR-8225 Slow™	6, 7
395HC™	Permattach 395HC™	8	UR-8331™	Macroplast® UR-8331™	6, 7
0880™	Adhesin® 0880™	8	UR-8340RD™	Macroplast® UR-8340RD™	6, 7
2787™	Technomelt® 2787™	3	UR-8340™	Macroplast® UR-8340™	6, 7
5621™	Technomelt® 5621™	3	UR-8341™	Macroplast® UR-8341™	6, 7
5646™	Primamelt™ 5646™	3	UR-8343RD™	Macroplast® UR-8343RD™	6, 7
8668™	Technomelt® 8668™	3	UR-8343™	Macroplast® UR-8343™	6, 7
8848™	Technomelt® 8848™	3	UR-8344RD™	Macroplast® UR-8344RD™	6, 7
B 7663G™	Macroplast® B 7663G™	5	UR-8344™	Macroplast® UR-8344™	6, 7
B 7663™	Macroplast® B 7663™	5	UR-8345RD™	Macroplast® UR-8345RD™	6, 7
Cleaner 2™	Purmelt® Cleaner 2™	5	UR-8345™	Macroplast® UR-8345™	6, 7
Cleaner 3180™	Purmelt® Cleaner 3180™	5	UR-8346RD™	Macroplast® UR-8346RD™	6, 7
MS 3210™	Dorus® MS 3210™	2	UR-8346™	Macroplast® UR-8346™	6, 7
ND-4100™	Dorus® ND-4100™	8			
PL-452A™	Dorus® PL-452A™	8			
Q-84-8890™	Technomelt® Q-84-8890™	2			
Q-4206™	Technomelt® Q-4206™	2			
Q-4222™	Technomelt® Q-4222™	2			
QR-004A™	Purmelt® QR-004A™	5			
QR-513C™	Purmelt® QR-513C™	4			
QR-798A™	Purmelt® QR-798A™	4			
QR-834A™	Purmelt® QR-834A™	4			
QR-862A™	Purmelt® QR-862A™	4			
QR-913A™	Purmelt® QR-913A™	4			
QR-5003™	Purmelt® QR-5003™	4			
QR-7799™	Purmelt® QR-7799™	4			
R-508B™	Purmelt® R-508B™	4			
R-508™	Purmelt® R-508™	4			
R-600™	Purmelt® R-600™	4			
R-633™	Purmelt® R-633™	4			

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