

DOW ADHESIVES

# Pressure Sensitive Adhesives

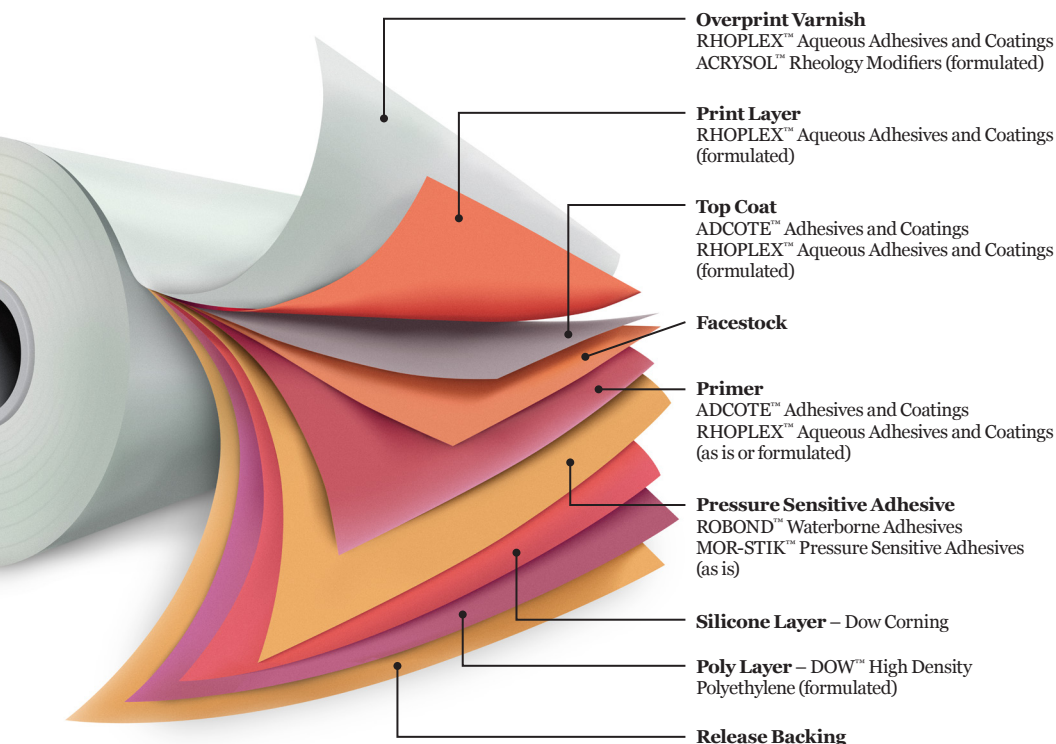
Optimum chemistry for label applications

**DOW**

®



## Pressure Sensitive Adhesives for Labels



From resins for substrates, to a proven portfolio of adhesives, to products for coatings, laminations, and release liners, Dow and Dow Corning materials can be found in virtually every layer of a PSA label.

Pressure sensitive labels today are all around us. They are found on beverage containers, personal care products, over-the-counter medication bottles, low-temperature and ice bucket applications, and corrugated boxes, as well as Variable Information Printing (VIP) labels, address labels, removable and resealable labels, battery labels, and shelf markings at retail stores.

Pressure sensitive adhesives used in these labels have demanding performance requirements: removable and repositionable, UV and heat resistant, adhesion to low surface energy substrates, performance on curved surfaces, low temperature and ice bucket resistance, water whitening resistance, durability and aging stability, good wet-out and high speed converting, and die cutting and stripping properties.

### Solutions for Better Labels

The Dow Chemical Company (Dow) is a recognized world leader in Pressure Sensitive Adhesives (PSA) knowledge, innovation, customer service, reliable supply, and value. Dow offers acrylic emulsion PSAs for a variety of label applications.

The following tables offer an at-a-glance catalog of Dow's proven options:

**Table 1: Acrylic Emulsion Label Adhesives Properties**

Classification	Type	Face Stock	Product	175.105 FDA	TS (%)	pH	Viscosity (cps)	Tg (°C)	Peel	Loop Tack
Permanent	Base	Paper & Film	RHOPLEX™ N-1031-D	Yes	54.0	8.6	80	-29	Low-Med	Low-Med
Permanent	Base	Paper & Film	RHOPLEX™ N-580	Yes	55.0	8.4	100	-42	Med	Med
Permanent	Base	Paper & Film	RHOPLEX™ N-619	Yes	57.0	7.8	100	-35	High	High
Permanent	Base	Paper & Film	ROBOND™ PS-7860	Yes	66.5	7.6	300	-40	Med	Med
Permanent	RTU	Paper	ROBOND™ PS-7440	Yes	54.0	9.0	1200	-32	High	High
Permanent	RTU	Paper	ROBOND™ PS-7619	Yes	54.0	9.0	250	-24	High	High
Permanent	RTU	Paper	ROBOND™ PS-7735	Yes	58.0	8.5	1100	-48	Med	Med
Permanent	RTU	Paper	ROBOND™ PS-7874K	Yes	53.0	8.1	800	-33	High	High
Permanent	RTU	Film	ROBOND™ PS-68	Yes	55.0	7.5	300	-35	High	High
Permanent	RTU	Film	ROBOND™ PS-8200	Yes	50.5	9.0	1500	-35	Med	Med
Permanent	RTU	Film	ROBOND™ PS-8537	Yes	55.5	7.2	1500	-36	High	High
Permanent	RTU	Film	ROBOND™ PS-8915	Yes	50.0	7.0	250	-33	High	Med
Permanent	RTU	Film	ROBOND™ PS-8915M	Yes	50.0	7.0	1200	-33	High	Med
Reclosable	RTU	Film	ROBOND™ PS-9260	Yes	47.5	9.4	175	-51	Med	Low
Removable	RTU	Film	ROBOND™ PS-8120HV	Yes	54.0	8.8	500	-50	Low	Low
Removable	RTU	Film	ROBOND™ PS-8942	Yes	50.0	7.0	450	-51	Med	Med
Overlamination	RTU	Film	ROBOND™ PS-94	Yes	53.0	8.0	150	-42	Med	Med

**Table 2: Acrylic Emulsion Label Adhesives Product Selection Guide**

	Base	Permanent	Removable / Reclosable	Direct Mail	Low Temp / All Temp	Corrugated Box	High Adhesion	Personal Care	Decorative Premium Labeling	Beverage	Ice Bucket	High Mandrel	Industrial	Over-lamination	Graphics
<b>RHOPLEX™</b>															
N-1031-D	•	•													•
N-580	•	•													
N-619	•	•					•								
<b>ROBOND™</b>															
PS-7860	•	•		•		•						•			
PS-7440		•		•		•									
PS-7619		•		•		•	•		•			•			
PS-7735		•			•										
PS-7874K		•			•					•	•				
PS-68		•						•							
PS-8200		•						•							
PS-8537		•					•							•	
PS-8915		•						•	•	•				•	•
PS-8915M		•						•	•	•				•	•
PS-9260			•												•
PS-8120HV			•												•
PS-8942			•												•
PS-94		•												•	

Data per Dow tests. Typical values, not to be construed as specifications. Additional information available upon request.

Shear	Description
High	Low peel, very high shear, good plasticizer migration resistance.
High	Medium peel / shear base.
Low	High peel / low shear base, very good adhesion to polyolefins.
High	High speed coatability.
Med	Tackified acrylic, good adhesion to polyolefins and cardboard. Excellent high speed converting.
Med	High adhesion tackified acrylic, excellent adhesion to low energy surfaces. Suitable for complex prime labels.
Med	Broad temperature range label adhesive, good adhesion to a range of substrates, good mandrel and good convertibility.
Low	Excellent tack and broad application temperature range. Suitable for wine, beer, and ice bucket applications.
Low	Excellent clarity and wet-out, good adhesion to polyolefins.
Med	Exceptional clarity and dry flow for clear and matte labels.
Med	Good adhesion to untreated polyolefin surfaces, excellent choice for drum label applications.
High	Excellent plasticizer migration resistance, blush resistance and adhesion to low energy surfaces. Good water whitening resistance. Suitable for beverage labels.
High	Excellent plasticizer migration resistance, blush resistance and adhesion to low energy surfaces. Good water whitening resistance. Suitable for beverage labels.
High	Moderate adhesion for reclosable packaging applications.
High	Minimal adhesion build, suitable for PVC and PET applications, and window graphics.
High	Excellent plasticizer migration resistance and blush resistance. Limited peel build.
High	High clarity, good cold flow, high shear.

Data per Dow tests. Typical values, not to be construed as specifications. Additional information available upon request.

## From Basics to Breakthrough

Dow has a distinguished history in the pressure sensitive adhesives marketplace. Covering a broad spectrum of applications including tapes and labels, release coatings and liners, signage and protective film, graphic arts, nonwoven binders, and formulation additives, Dow's expertise is founded on a depth of experience unlike others in the industry.

The Dow product portfolio is filled with landmark innovations, proven premium brands, and well-trusted workhorses used throughout the adhesives, binders, and coatings industries.

### Dow and Dow Corning: Combining Acrylic PSAs with Silicone Release Coatings to Deliver Innovative Label Technologies

After collaborating as joint venture partners for 73 years, Dow now has 100 percent ownership of Dow Corning's silicones business.

Dow, together with Dow Corning, offers you:

- The industry's only single-source supplier for PSA adhesives and release coatings
- More comprehensive portfolio offerings with a wider range of differentiated, high-value solutions
- Combination of core strengths of R&D, technical support, industry expertise, and worldwide geographic reach to deliver innovative technologies through the combination of acrylic PSAs and silicone release coatings

### Experts with Answers

Dow scientists and technicians, our "Experts with Answers," have many years of experience in the adhesives and label industries, and have a wide knowledge base of the technologies used in these fields. Dow technical personnel are tasked with fully understanding the end-use processes and requirements, while Dow's researchers stay on the cutting edge of technological improvements.

## Collaborate to Innovate

While we believe Dow has some of the best and brightest people in the industry, we know that collaboration is key and that bringing other experts to the table is the best way to discover the ideal solution. Nowhere is the collaborative spirit greater than when working side-by-side with one or more of Dow's adhesives and label professionals. Together, whether at customers' facilities, or at one of Dow's state-of-the-art technical centers, there are opportunities for teamwork, hands-on support, and sharing that can rapidly advance the creation of new products that succeed in the marketplace.

Products, technologies, global resources, and a dedicated team of willing and knowledgeable collaborators committed to helping you succeed... all await your next project. Contact a Dow sales or Technical Service professional to start the innovative and inventive process that could lead to your "next big thing."

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