

DOW COATING MATERIALS

Liquid applied sound damping

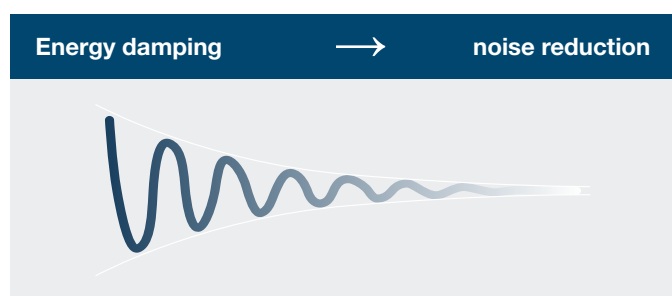
with ACOUSTICRYL™ Acrylic Resins

The Dow logo, consisting of the word "DOW" in white, bold, sans-serif capital letters inside a red diamond shape. A small registered trademark symbol (®) is located at the bottom right of the diamond.

DOW®

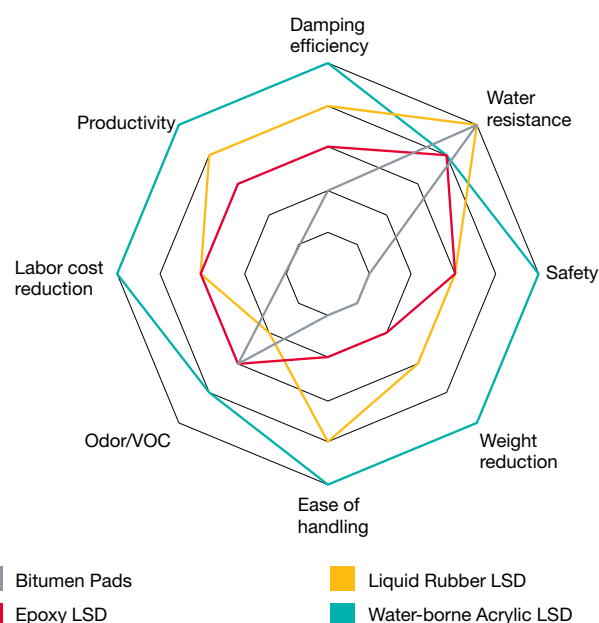


Silence in motion



ACOUSTICRYL™ Acrylic Resins for liquid applied sound damping (LASD) offer easy spray alternatives to preshaped asphaltic insulating pads and performance advantages over other sprayable technologies.

- Passenger cars
- Marine/rail
- RV/van/bus
- Agriculture and construction equipment
- Washers/dryers
- Dishwashers
- Refrigerators
- HVAC units
- Air conditioners
- Floors/roofs
- HVAC ducts
- Elevator shafts
- Service conduits
- Boiler rooms



LSD: Liquid Sprayed Dampers

Source: Dow research
This diagram represents an opinion based on general knowledge of the different technologies. These are properties not to be construed as specifications.

Sound damping systems based on ACOUSTICRYL™ Acrylic Resins offer key advantages over traditional sound damping systems.

Acrylic vs. liquid rubber

- Better damping options
- Lower weight options
- Lower odor / lower VOC

Acrylic vs. epoxy

- Better damping options
- Lower weight options
- Non-reactive on the line

Acrylic vs. bitumen pads

- Better damping options
- Lower weight options
- Automated streamline process

Customized solutions

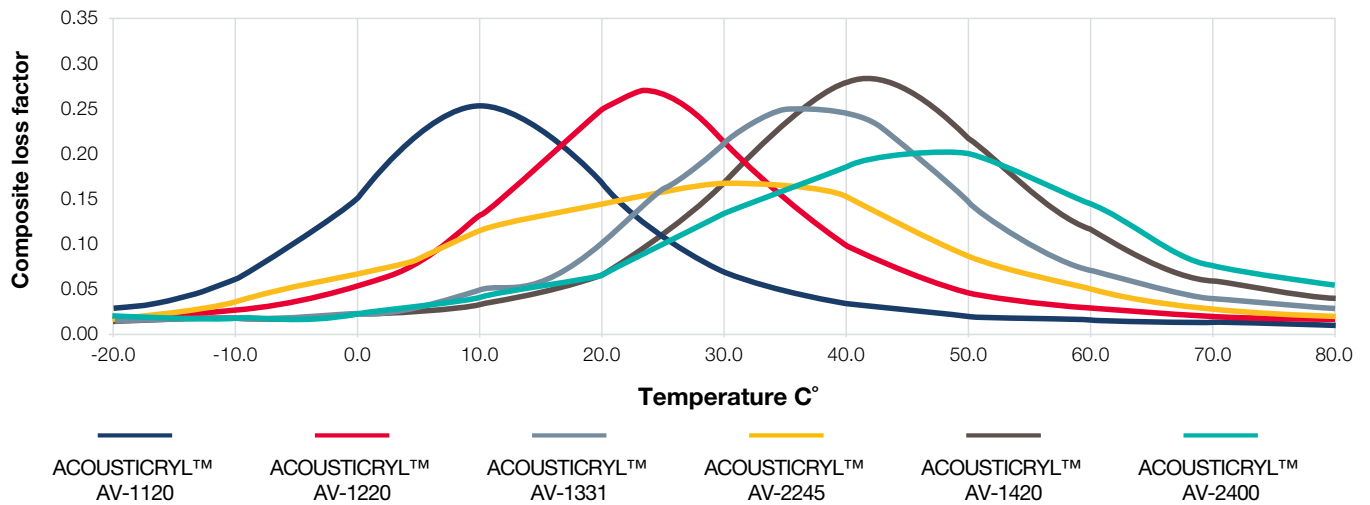
Through changes in glass transition (Tg) and other emulsion construction variables, ACOUSTICRYL™ Acrylic Resins can be tailored to the damping performance needs of individual OEM specifications. A dedicated technical service team is available for support.

Loss factor performance

Base beam: 1 mm X 10 mm X 215 mm (240 mm in total length)

Dry coating density: 3.5 Kg/m²

Curing conditions: 30 min (25 °C), 30 min (150 °C), Frequency Interpolation: 200 Hz



Source: Dow Coating Materials 2022
These are typical properties not to be construed as specifications.
Tested formulations available upon demand

The ACOUSTICRYL™ Acrylic Resins advantage

ACOUSTICRYL™ Liquid Applied Sound Damping Resins offer a combination of composition, process and performance advantages.

Composition	Process	Performance
<ul style="list-style-type: none"> Water-borne 	<ul style="list-style-type: none"> Single step and streamlined process Spray application Safer (less handling) 	<ul style="list-style-type: none"> Higher damping performance Lower application weight Customized sound damping profile

Features and benefits

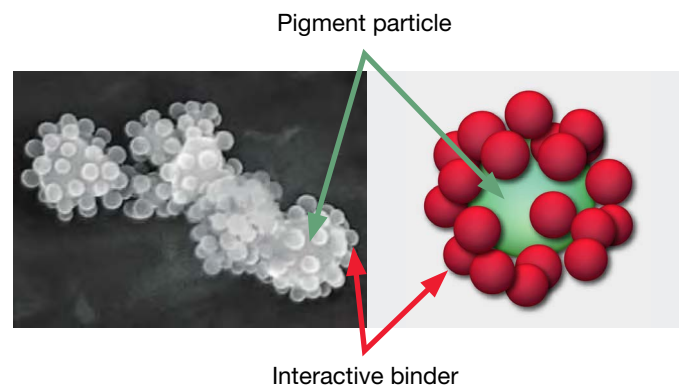
- Advanced water-borne technology/low VOC emissions
- Good health and safety profile for workers
- Up to 35% lower weight compared to alternative technology
- Cost reduction due to one step spray process
- Excellent noise reduction
- Smart noise management
- Customizable solutions
- Global supply capability
- Up to 70% lower water uptake compared to LASD formulated with alternative acrylic binders

Upgrade with AVANSE™ Technology

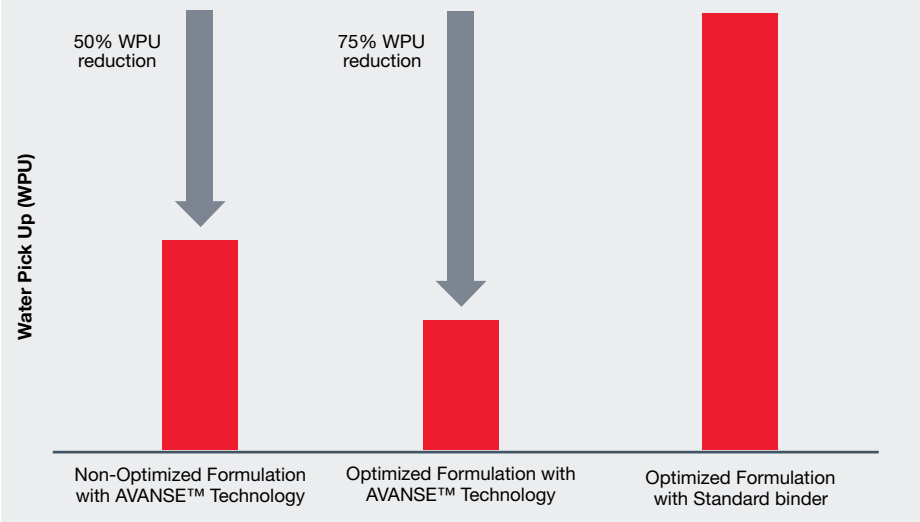
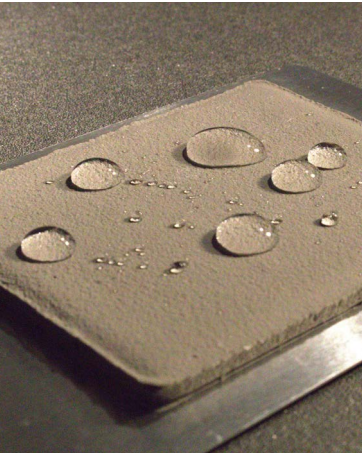
Next-generation ACOUSTICRYL™ Acrylic Resins feature a novel mechanism that activates the inorganic phase and offers a notable boost to sound-damping properties.

Compared to standard latexes, ACOUSTICRYL™ Acrylic Resins with AVANSE™ Technology offers improved damping performance at equivalent coating weight or equal performance with a notable reduction in coating weight, less latex and more filler, without a significant drop in performance, and formulation latitude allowing for higher levels of platy fillers, which are better for damping.

If formulation is optimized, it can drastically reduce water uptake allowing application where resistance to moisture/water are more demanding.



Optimized Formulation with AVANSE™ Technology



Source: Dow Coating Materials 2023
These are properties not to be construed as specifications.
Tested formulations available upon demand.

Product details

Acrylic resins with AVANSE™ Technology	Solids (%)	pH	Viscosity (cP)	Tg (°C)	Peak damping temperature (°C)	Sound damping curve
ACOUSTICRYL™ AV-1120	55	8.6-9.3	50-500	-14	5 - 15	
ACOUSTICRYL™ AV-1220	50	8.6-9.3	50-250	-3	20 - 28	
ACOUSTICRYL™ AV-1331	55	8.6-9.3	10-1500	9	32 - 43	
ACOUSTICRYL™ AV-1420	55	8.6-9.3	10-1500	13	37 - 46	
ACOUSTICRYL™ AV-2245	55	8.6-9.3	50-1000	-4	20 - 42	
ACOUSTICRYL™ AV-2400	53	8.6-9.3	50-500	15	38 - 56	

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Tested formulations available upon demand

For more information please consult our web site
[dow.com](https://www.dow.com)

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