

# Daran<sup>®</sup> Barrier Emulsions and Polidene<sup>®</sup> PVDC Emulsions

For Packaging and Industrial Coatings



# Daran® Barrier Emulsions

## Solutions for Flexible and Rigid Packaging

Daran® aqueous emulsions improve pharmaceutical and food packaging materials by providing barrier properties which prevent the transmission of moisture vapor, oxygen, and odors. Daran® coated structures provide excellent gloss & clarity, good heat seal strength, and the ability to be thermoformed. The Daran® family of barrier emulsions can also be used as barrier adhesives and extrusion primers.

Product	Description	Application
<b>Daran® SL112</b>	<ul style="list-style-type: none"> <li>High barrier performance for protection from oxygen and water vapor</li> <li>High surface tension for holdout in porous materials</li> </ul>	<ul style="list-style-type: none"> <li>Basecoat for paper packaging</li> </ul> Paper coatings, Film coatings
<b>Daran® SL243</b>	<ul style="list-style-type: none"> <li>High barrier performance for protection from oxygen and water vapor</li> <li>High surface tension for holdout in porous materials</li> </ul>	<ul style="list-style-type: none"> <li>Oil &amp; grease resistance</li> </ul> Paper coatings
<b>Daran® SL158</b>	<ul style="list-style-type: none"> <li>High barrier performance for protection from oxygen and water vapor</li> <li>Heat sealable with good seal strength at high line speeds</li> </ul>	<ul style="list-style-type: none"> <li>Quickly develops resistance to haze when exposed to solvent inks and laminating adhesives</li> </ul> Paper coatings, Film coating, Printing inks
<b>Daran® SL159</b>	<ul style="list-style-type: none"> <li>High barrier performance for protection from oxygen and water vapor</li> <li>Heat sealable with good seal strength at high line speeds</li> </ul>	<ul style="list-style-type: none"> <li>Improved slip, anti-blocking, and other surface characteristics</li> <li>Thermoformable</li> </ul> Pharmaceutical blister pack, Paper coatings, Encapsulation
<b>Daran® 195</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> <li>Heat sealable with good seal strength at high line speeds</li> </ul>	<ul style="list-style-type: none"> <li>Thermoformable</li> </ul> Film coatings, Encapsulation
<b>Daran® 400</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> <li>Heat sealable with good seal strength at high line speeds</li> </ul>	<ul style="list-style-type: none"> <li>Thermoformable</li> </ul> Film coatings, Encapsulation
<b>Daran® 546L</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> <li>Laminating adhesive for treated films</li> </ul>	<ul style="list-style-type: none"> <li>Low foam and viscosity for gravure and reverse gravure</li> </ul> Film coating, Barrier laminating adhesives, Extrusion coatings
<b>Daran® 2010</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> </ul>	<ul style="list-style-type: none"> <li>Excellent adhesion to polyolefins</li> </ul> Film coatings, Barrier laminating adhesives, Primer coatings
<b>Daran® 2026</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> </ul>	<ul style="list-style-type: none"> <li>Excellent adhesion to paper and polyolefins without the need for additional primer</li> </ul> Film coatings, Barrier laminating adhesives, Primer coatings
<b>Daran® 2060</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> <li>Can be formulated as a jaw release coating</li> </ul>	<ul style="list-style-type: none"> <li>Excellent adhesion to paper and polyolefins without the need for additional primer</li> </ul> Film coatings, Primer coatings, Jaw release coatings
<b>Daran® 2061</b>	<ul style="list-style-type: none"> <li>Barrier performance for protection from oxygen and water vapor</li> <li>Can be formulated as a jaw release coating</li> </ul>	<ul style="list-style-type: none"> <li>Excellent adhesion to paper and polyolefins without the need for additional primer</li> </ul> Film coatings, Primer coatings, Jaw release coatings
<b>Daran® 8100</b>	<ul style="list-style-type: none"> <li>Superb barrier performance for protection from oxygen and water vapor</li> </ul>	<ul style="list-style-type: none"> <li>Thermoformable</li> </ul> Pharmaceutical blister pack
<b>Daran® 8550</b>	<ul style="list-style-type: none"> <li>Superb barrier performance for protection from oxygen and water vapor</li> </ul>	<ul style="list-style-type: none"> <li>Excellent film formation</li> </ul> Film coatings, Paper coatings



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Solutions for Flexible and Rigid Packaging

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## Daran® Barrier Technology



	Non-Volatile Content (%)	Viscosity (cps)*	Surface Tension (dynes/cm)	pH	Tg of film (°C)	Shelf Life (months)
Daran® SL112	54	15	67	2.0	20	9
Daran® SL243	54	15	60	2.0	14.5	9
Daran® SL158	58	15	40	2.0	18.5	6
Daran® SL159	54	12	42	2.0	18.5	9
Daran® 195	58	10	38	3.0	179	12
Daran® 400	58	10	38	1.8	179	6
Daran® 546L	46	35	51	2.3	9	6
Daran® 2010	50	10	46	1.8	22.6	3
Daran® 2026	45	12	38	1.5		6
Daran® 2060	50	10	45	1.5	22.7	6
Daran® 2061	50	10	38	1.5	22.7	12
Daran® 8100	60	22	32	3.0	18.5	12
Daran® 8550	49	12	52	2.0	17	6

\* LVF#1, @60rpm @25°C/77°F

# Polidene® PVDC Emulsions

## Solutions for Industrial Coatings

Polidene® aqueous, low VOC, PVDC emulsions enhance direct-to-metal, construction, and industrial coatings by providing low water vapor permeability and early water resistance.

- **Corrosion Protection:** Polidene® based anticorrosive primers and single coat systems provide excellent corrosion resistance for water-based paints, which are better for both health and the environment.
- **Moisture Vapor Barrier:** Polidene® based single component coatings and primers are easy to apply and increase protection against moisture when applied to hygroscopic surfaces.
- **Fire Retardant:** Polidene® based fire retardant and intumescent coatings check flame spread and retard heat penetration in industrial coatings and textiles.

	Automotive primers & Underbody coatings	(IK DTM) Metal Coatings	Textiles & Fabrics	Hygroscopic construction materials	Fire retardant & Intumescent coatings	Key Properties	pH	Non-Volatile Content (%)	Viscosity (cps)*	T <sub>g</sub> (°C)
<b>Polidene® SL143</b>	X			X		Outstanding metal protection and high surface tension for holdout in porous materials	2	54	15	14.5
<b>Polidene® 33-086</b>			X		X	Excellent early water and corrosion resistance, good adhesion to synthetic fibers, self-crosslinking, flexible binder	4.5	55	150	-4
<b>Polidene® 37-0065</b>	X	X				Excellent early water, chemical and corrosion resistance	2.5	60	50	16
<b>Polidene® 777</b>		X			X	Outstanding metal protection & chemical resistance	4	55	15	22

\* LVF#1, @60rpm @25°C/77°F

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