HYPOD™ Polyolefin Dispersions from Dow
Frequently Asked Questions

What is the process involved in making HYPOD™ Polyolefin Dispersions (PODs)? HYPOD is enabled by BLUEWAVE™ Technology, Dow’s proprietary and patented mechanical-dispersion technology.

How much of the process depends on chemistry? Chemistry is required for both the initial production and stabilization of the dispersions as well as the performance of the dispersion in end-use.

What types of polymers are used? The types of polymers utilized include homopolymers and copolymers of ethylene or propylene with additional functionality to be tailored as necessary for the targeted application.

How would you characterize the chemistry of such a waterborne system? HYPOD™ Polyolefin Dispersions are high solids, high-molecular-weight, anionically stabilized dispersions having a particle size of about 1 micron.

How is this really different? This is the first time converters can get the performance properties of a polyolefin with the benefits of water-based application. What we’re offering is a much higher molecular weight and much higher solids than previously possible.

What applications benefit from polyolefin dispersions? The applications below provide examples of where HYPOD has a market fit:
- Paper and board coatings
- Carpet backing
- Fabric coating and textile impregnation/footwear
- Flexible packaging
- Paints and coatings
- Glass coatings

Are any coalescents involved in helping to form a film from the waterborne dispersions, or do films form only on the application of heat? Through formulation we can modify film formation temperature to achieve films at room temperature; however, HYPOD™ Polyolefin Dispersions form the most robust films when heated.

Are there any VOC emissions formed in the use of the new dispersions? No solvents are added in the production of HYPOD™ Polyolefin Dispersions.

Where can the new dispersions be used as a simple drop-in for conventional solvent-borne polyolefins? HYPOD can replace solvent-based lacquers in applications such as lidding stock for the dairy industry.

What sorts of film and foam products can converters make with the new dispersions? HYPOD™ Polyolefin Dispersions are typically used as a coating on other substrates as opposed to a stand-alone film. It can produce soft, open-celled foams that are potentially useful in disposable hygiene applications. HYPOD can also be used to modify other coating systems.