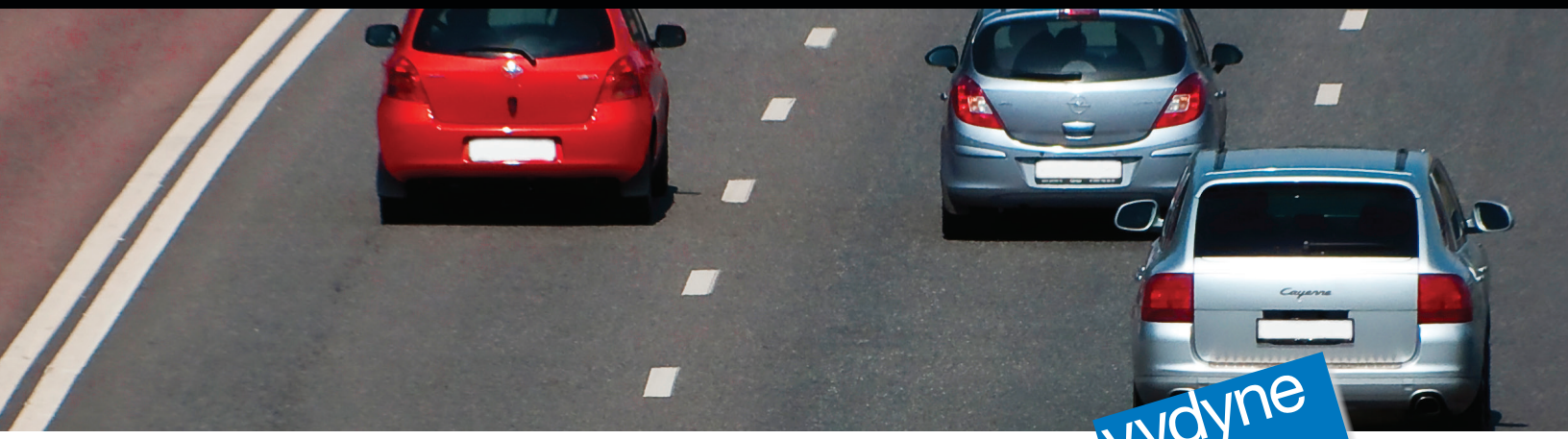
ASCEND PERFORMANCE MATERIALS

application profile:

# power-steering reservoir



In the automotive industry, you need PA66 products that perform to a higher standard. Vydyne® resins and compounds help you get the most out of every part you produce. For under-the-hood applications, Vydyne products deliver superior chemical and heat resistance. For exterior and interior components, Vydyne offers versatile, reliable and customizable resins. Our quality and consistency make the difference in your production efficiency.

**Products Used:** R515T (Translucent)
**Benefits:** Chemical Resistance • Temperature Resistance • Strength • Design Flexibility • Easy to Mold

## Application Description

Pictured below is a translucent power-steering reservoir that appears in various Asian-made passenger vehicles. This reservoir has provisions for mounting along with connections for the power-steering hydraulic lines.

## The Challenge

Automotive reservoirs must have excellent resistance to under-the-hood chemicals and intense heat. The combination of heat and chemicals can cause an undesirable color shift or rapid degradation of many plastics.

| R515T | | | |
|---|---|---|---|
| Property | Method | Units | DAM |
| Density | ISO 1183 | g/cm$^3$ | 1.48 |
| Tensile Stress | ISO 527-2 | MPa | 103 |
| Flexural Modulus | ISO 178 | MPa | 6,100 |
| Notched Izod | ISO 180 | kJ/m$^2$ | 9 |
| DTUL @ 1.8 MPa | ISO 75-2/A | °C | 118 |

## The Vydyne Difference

Using Ascend's Vydyne R515T to create this translucent reservoir allows consumers to check fluid levels without a dipstick. Eliminating the need for a dipstick makes production more economical and increases the convenience for consumers. Vydyne R515H was used to create the reservoir cap. These two components are then welded together. Vydyne products are used for a variety of reservoir designs for both domestic and foreign automakers.

***For more information, see your Ascend representative or visit www.ascendmaterials.com.***