

## *What are Prolite Microsphere Filler Blends?*

Prolite Blends feature solvent resistant expanded polymeric microspheres that can be blended with a variety of minerals and chemicals to your specific gravity requirements.

Prolite Microsphere Filler Blends extremely low density can replace other higher density raw materials thus **reducing the weight** of your product while **increasing your volume** and **lowering your cost** by volume. Reduced weight can mean better gas mileage, lower freight cost and easier product handling. In addition, the use of Prolite can **reduce shrink**, **lower VOC's**, provide **thermal insulation**, and **sound reducing** properties. If you are already using a lightweight sphere, by moving to a lightweight blend you can reduce the number of separate additions to your batching, greatly simplifying your process and reducing potential of errors.

### *Benefits of using Prolite Blends*

- ◆ Reduced Weight
- ◆ Thermal Insulating
- ◆ Reduced Cost
- ◆ Closed Cells
- ◆ Reduced Shrinkage
- ◆ Reduced VOC's
- ◆ Sound Insulating
- ◆ Sand-ability

Prolite Blends microspheres are made up of a co-polymer membrane encapsulating a hydrocarbon. When heated, the co-polymer membrane softens while the encapsulated hydrocarbon starts to gasify and exert expanding pressure to the soft membrane, resulting in a controlled expansion.



### *Processing Features of Prolite Blends*

- ◆ Sprayable
- ◆ Shear Stable
- ◆ Compressible
- ◆ Pumpable



Prolite Microsphere Filler Blends can be used as a lightweight filler in many applications.

- ◆ Paints    ◆ Coatings    ◆ Polyester Putty    ◆ Caulks    ◆ Sealants    ◆ Foam Tooling Board
- ◆ Under-body Coatings    ◆ Fiberglass Spray-up    ◆ Cultured Marble    ◆ Concrete

## Prolite Microsphere Filler Blend Benefits

### *Reduced Weight*

The use of a Prolite Blend can provide considerable weight reduction. Due to its extremely low density, Prolite Blends will volumetrically displace other higher density fillers.

### *Lower Cost*

The use of a Prolite Blend can result in significant cost savings. This is because Prolite Blends can volumetrically replace more expensive resins and binders.

### *Closed Cell Structure*

Prolite Blend expanded polymeric microspheres unique uniform closed cell structure will reduce water penetration and provide a more uniform foam product as compared to a blowing agent or open cell structure lightweight additive.

### *Sand-ability*

Prolite Blend products have very low abrasiveness and are easy to sand.

### *Thermal Insulating*

The use of Prolite Blends will reduce thermal conductivity of the final product. This is accomplished by its hollow, closed cell structure, which introduces closed voids into the material.

### *Sound Insulation*

The use of a Prolite Blend in under-body coatings will give improved sound and vibration insulation properties.

### *Reduced Shrink*

Prolite Blends have a low resin/binder demand. Adding Prolite Blends to a matrix with a shrinking resin/binder can result in less shrink, improving the properties and finish of the end product.

### *Reduce VOC's*

The use of Prolite Blends will volumetrically reduce resin/binder which reduces VOC emissions from the resin/binder.

# Prolite Microsphere Filler Blends Processing Features

## *Shear Stable*

Prolite Blends polymeric microspheres are virtually unbreakable during high shear stress. The Prolite Blends lightweight spheres flex and absorb the high shear.

## *Compressible*

Prolite Blends under compression will act like a balloon, compressing and elongating while under pressure and popping back to sphere form as soon as the pressure is released.

## *Pumpable*

As with the shearing, Prolite Blends can be pumped virtually undamaged because of its extremely low density and elasticity.

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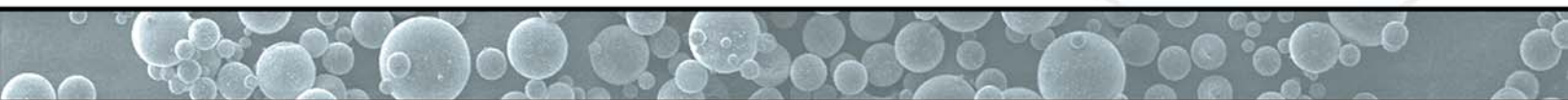
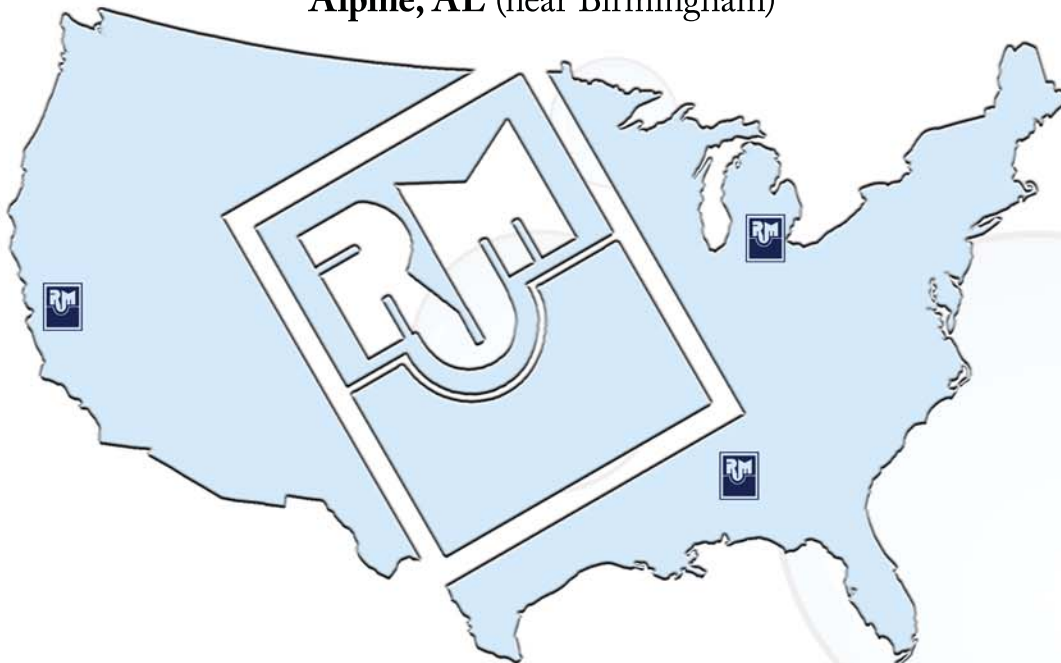
## Locations

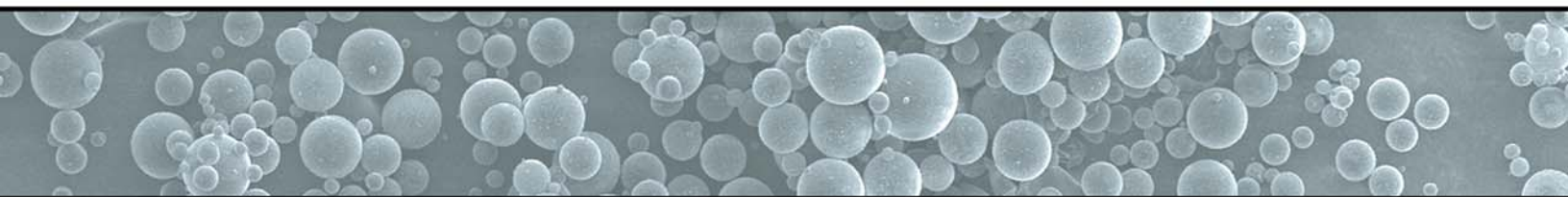
The R.J. Marshall Company processes and ships Prolite Blend products from three (3) processing locations in the United States.

**Valley Springs, CA** (near Sacramento)

**Rockwood, MI** (near Detroit)

**Alpine, AL** (near Birmingham)





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