

## PUMA COAT B425

### Introduction

PUMA Coat B425 is a one component, flammable, solvent based In-mold Coating (IMC) system. PUMA Coat B425 offers excellent light and heat stability. The combination of these properties makes PUMA Coat B425 the ideal general purpose IMC for rigid polyurethane foam systems, especially high density grades (100–700 kg/m<sup>3</sup>). When used on silicone molds, B425 acts as a barrier coat, helping to prolong the life of the mold by protecting it from attack by the components of polyurethane systems.

### Method of Use

PUMA Coat B425 is applied using conventional air spray equipment. An air atomization pressure of 28.6–42.9 psi (2–3 bar) and a nozzle size of 0.5–1.0 mm is recommended. When pressure pots are used, fluid pressures of 28.6–35.75 psi (2–2.5 bar) are normally applied. High Volume Low Pressure (HVLP) guns are worth considering on environmental and cost-saving grounds.

Before application, polyurethane, metal, and epoxy molds should be treated with an appropriate release agent. Next, you should coat the mold surface with an even coat of PUMA Coat, avoiding excessive application which can result in flooding and slow drying.

When applied correctly, paint usage is approximately 204–326 ft<sup>2</sup>/gal (5–8 m<sup>2</sup>/L) and dry film thickness is 20–25 µm. If the mold temperature of 95–122° F (35–50° C), the finish will be completely dry in 10–60 seconds. The exact time will depend upon paint formulation, spraying technique, mold design, and atmospheric conditions. High atomization pressure gives rise to “bounce back” and wide fan patterns cause excessive overspray. If the paint is not allowed to dry completely before molding, blistering will occur. Blistering results from the entrapment of solvent between the paint film and the polyurethane.

The surface finish obtained i.e., whether it is glossy or matte, depends mainly on the mold surface and the choice of release agent.

### Typical Physical Properties

The following table explains the typical physical properties of PUMA Coat B425.

Property	Clear	Colored
<b>Non-volatile Solids (% by weight)</b>	8.0	9.5–11.5
<b>Viscosity (Ford No 4 Cup, Seconds 71.6° F (22° C))</b>	12–15	12–15
<b>Specific Gravity (g/cc 71.6° F (22° C))</b>	1.07	1.07–1.12
<b>Flash point (Abel Pensky Closed Cup)</b>	69.8–131° F (21–55° C)	69.8–131° F (21–55° C)

### Cleaning and Dilution

A range of individual solvent blends developed for equipment cleaning and product dilution is available. Since PUMA Coat stains and lacquers can be irreversibly damaged by dilution with the wrong solvent, the use of a correctly formulated blend is essential.

### Storage

The recommended temperature range for storage is 50–77° F (10–25° C). Temperatures above 86° F (30° C) should be avoided because of the danger of excessive pressure build-up in the containers. Before use, stir or shake containers to ensure the product is well mixed.

### Shelf Life

12 months at 77° F (25° C).