

# PEP SET™ BLUE



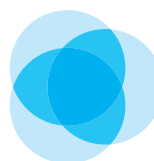
## VOC-REDUCED POLYURETHANE NO-BAKE BINDER SYSTEM WITH IMPROVED CLASSIFICATION

Odor pollution is a significant challenge in foundries. When mixing and mold making in particular, unpleasant odors can be produced, making it uncomfortable for employees to work. In addition to the health aspect, sustainability and the possibility of reducing emissions in production are becoming increasingly important.

Thanks to the state-of-the-art development PEP SET™ BLUE, the polyurethane no-bake binder system does not contain any hazardous ingredients in the Part 1 resin. Part 1, which is label-free, has therefore much less odor. With its latest development PEP SET™ BLUE, ASK Chemicals thus offers a solution to reduce odors in the foundry and to protect employees. Thanks to BLUE technology, PEP SET™ BLUE offers high productivity and improved occupational safety at the same time. Another advantage of PEP SET™ BLUE is environmental friendliness with a significantly lower content of harmful monomers (especially phenol) and a reduction in VOC emissions.

### TECHNOLOGICAL ADVANTAGES

- Label-free part 1
  - No hazard symbols
- Low VOC content
- Low free phenol content
- Low aggressiveness of the solvents
- Reactivity adjustable over a wide range
- High strengths



# PEPSET™ BLUE

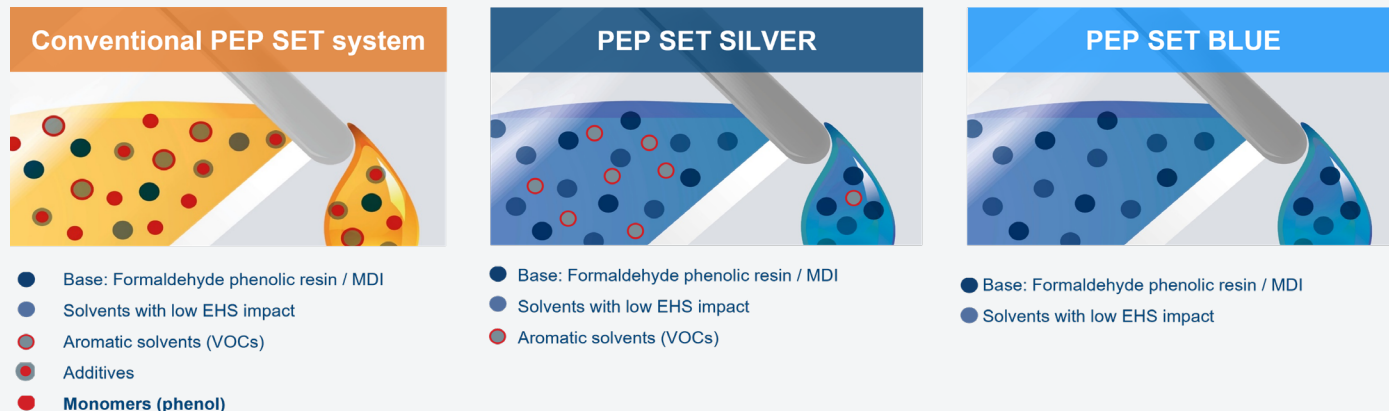


Figure 1: Development of conventional PEP SET™ through PEP SET™ SILVER up to PEP SET™ BLUE with less and less hazardous ingredients (according to the CLP regulation)

### Modern Polyurethane No-Bake System

Following the successful development in the field of polyurethane cold box technology, ASK Chemicals has developed two new systems: PEP SET™ SILVER and PEP SET™ BLUE.

PEP SET™ SILVER is a binder system with a very low proportion of harmful monomers, especially phenol. This, combined with low EH&S (Environment, Health & Safety) impact solvents, makes PEP SET™ SILVER a polyurethane no-bake (PUNB) system that provides enhanced hazard labeling. The reduction of phenol in the formulation improves the foundry's emission load and reduces the phenol pollution in the used sand. It also offers many other advantages: high productivity, good strength development, good mechanical reclamation of the used sand, low smoke development when pouring and low odor pollution when mixing and molding.

### Environmentally friendly PEP SET™ BLUE

With the new PEP SET™ BLUE, ASK Chemicals is now taking another step towards more environmentally friendly PUNB binder systems. THE PEP SET™ BLUE technology also has a very low free formaldehyde and phenol content, which can also significantly reduce the phenol pollution in the used sand. In addition, the PEP SET™ BLUE dispenses with aromatic solvents. Due to the exclusive use of solvents with a low EH&S impact, the PEP SET™ BLUE part 1 resin does not require hazard labeling. The odor during mixing and molding can thus be further reduced. In addition, the reactivity of the PEP SET™ BLUE technology is adjustable over wide ranges with a comprehensive selection of catalysts.

### Low VOC PUNB binder

PEP SET™ BLUE dispenses with aromatic solvents and, in combination with the very low free phenol content, offers foundries the opportunity to reduce VOCs and BTX. Phenol reduction facilitates waste sand processing and reduces landfill costs. Part 1 resin of the 3-part PEP SET™ Systems

is not subject to hazard labelling requirements.

### Less hazard labeling and more occupational health and safety

The low-phenol PUNB technologies PEP SET™ SILVER and PEP SET™ BLUE cover various aspects of environmental protection and occupational safety. While the strengths of the PEP SET™ Silver lie in the easy mechanical reclamation of the used sand and the low smoke production during casting, the new PEP SET™ BLUE is particularly characterized by the label-free Part 1 resin and an even lower odor production during mixing and molding.

## YOUR SUSTAINABILITYPLUS

### Profitability

- Reducing the phenol pollution in the used sand
  - Less landfill costs

### Environment & Social

- Improved occupational safety
  - Odor reduction during mixing and molding
  - Lower hazard label categorization
- Low VOC content