### **TECHNICAL DATA SHEET**

**USP-EAGLE (BF 360)65%** 

Semi-Flexible pre-accelerated unsaturated polyester for body filler.

**Delivery form: 65 % in (Styrene)** 



Test	Standard	Unit	Method
Non-volatiles	63-67	%	ISO 3251
Viscosity, 25°C (Gardner-Holdt)	L-Q		ASTM D1545
Viscosity, 25°C (Brookfield)	300-400	mPa.s or cP	ISO 2555
Acid value	15 max.	mg KOH/g	ISO 2114
Color	8 max	Gardner	ISO 4630
Gel time	8-10	Minutes	
Cure time	10-15	Minutes	Using 2 gm BPO 50% on 100 grams of resin at 25°C
Peak Exothermic	90-110	°C	

### **Performance:**

Excellent sandability

Fast drying

Good wettability

- Good flexibility
- Good adhesion
- High reactivity

# **Application:**

- Standard car body filler.
- Lightweight car body filler.

## Compatibility:

USP-EAGLE (BF 360)65% is soluble in ketone and to a limited extent, ester and aromatic solvent. However, the use of solvents other than styrene is not recommended as they can lead to porosity of the film during curing which will subsequently adversely affect the continuity of any applied surface coating.

**Disclaimer:** The use of unsaturated polyester resins for car putties and other applications can be dangerous if not used properly. Eagle Chemicals assume no responsibility or liability for any damages whatsoever, including but not limited to direct, indirect, incidental, consequential, or punitive damages, arising out of or in any way connected with the use or misuse of this product.

The user assumes all risks and liability associated with the use of this product. The user should read and understand all warnings and instructions before using this product. Specifically, the properties of unsaturated polyester resins can be affected by temperature and formulation ingredients, such as dispersing agent, fillers quality, and inhibitor percent in styrene monomers. This can result in different results depending on the specific application, and the user should be aware of these risks before using the product.

In addition, unsaturated polyester resins are susceptible to gelling, which can occur when the resin is exposed to high temperatures or when the formulation ingredients are not compatible. Gelling can make the resin unusable, and it can also be dangerous if it occurs during the storage process. So, we recommend the customer do a storage stability test based on his own formulation at different temperatures to ensure product stability.

Review no: 1/2024 Issue date: Jan,2024 Page 1/2

## **TECHNICAL DATA SHEET**

**USP-EAGLE (BF 360)65%** 

Semi-Flexible pre-accelerated unsaturated polyester for body filler.

Delivery form: 65 % in (Styrene)



#### Recommendations

- Avoid highly acidic ingredients.
- For better stability check the compatibility of polyester resin with the other putty ingredients.
- Fillers should be carefully selected for better sandability & stability (metal contamination can negatively affect putty performance).
- The styrene monomer used should contain a minimum of 150 PPM of inhibitor.
- For long-term stability, inhibitors like HQ & TBC should be used. Optimal levels may be determined with a ladder series in the laboratory.
- Putty performance (flexibility, adhesion, sandability ... etc.) can be deviated according to the ingredients and temperature at application.
- Polyester putty is sensitive to changes in temperature so temperature tolerance should be carefully studied.
- Polyester putty may be exposed to an exceptional condition during shipping and that should be considered while product designing.
- The putty package should be tightly closed.
- When using lightweight filler (Q. CELL Hollow sphere) Avoid adding at high shear and we recommend using a butterfly mixer
- USP-EAGLE (BF 360)65% Is Semi-flexible, USP-EAGLE (BF 36-62)62% is Hard, and USP-EAGLE (BF 55-65)65% is a flexible grade polyester.

#### Storage:

USP-EAGLE (BF 360)65% should be stored indoors in the original, unopened, and undamaged containers in a dry place at storage temperatures between 5°C to 30°C. Exposure to sunlight should be avoided.

#### **Stability:**

Under the above-mentioned storage condition, the stability of USP-EAGLE (BF 360)65% will be 6 months ex-work.

**Disclaimer:** The use of unsaturated polyester resins for car putties and other applications can be dangerous if not used properly. Eagle Chemicals assume no responsibility or liability for any damages whatsoever, including but not limited to direct, indirect, incidental, consequential, or punitive damages, arising out of or in any way connected with the use or misuse of this product.

The user assumes all risks and liability associated with the use of this product. The user should read and understand all warnings and instructions before using this product. Specifically, the properties of unsaturated polyester resins can be affected by temperature and formulation ingredients, such as dispersing agent, fillers quality, and inhibitor percent in styrene monomers. This can result in different results depending on the specific application, and the user should be aware of these risks before using the product.

In addition, unsaturated polyester resins are susceptible to gelling, which can occur when the resin is exposed to high temperatures or when the formulation ingredients are not compatible. Gelling can make the resin unusable, and it can also be dangerous if it occurs during the storage process. So, we recommend the customer do a storage stability test based on his own formulation at different temperatures to ensure product stability.

Review no: 1/2024 Issue date: Jan,2024 Page 2/2