# Energizer® BK, Energizer LO and Energizer K Plus FR

Spray Application Guidelines



# **DESCRIPTION**

This guide covers proper application guidelines when spraying Energizer products. Airless spray equipment is an effective method of application particularly on large areas and irregular or vertical surfaces. Gas powered spray equipment can also be used (consult with equipment manufacturer for recommendations). Air-atomized application is not recommended. Personnel using these products should familiarize themselves with procedures for personal safety, workplace precautions, and equipment operation. Refer to product data sheet, safety data sheet and general instructions.

## **APPLICATION**

#### **Climatic Conditions**

- Rain, fog, dew, frost, and relative humidity above 90% will adversely
  affect Energizer products, impacting adhesion and physical properties
  of the coating. Do not apply if any of these conditions exist or will
  exist within 12 hours of application. The substrate must be dry at the
  time of application.
- At ambient temperatures below 60°F (15.6°C), store and maintain material temperature above 70°F (21.1°C) in the container. Auxiliary heat may be necessary to facilitate spray application. Material spray application temperature is recommended between 75°F to 95°F (23.9°C to 35°C).
- At ambient temperatures above 80°F (26.7°C), reduce the application rate on vertical or irregular surfaces to prevent sags or runs and install recommended coverage rate in multiple coats. Do not apply at ambient temperatures above 95°F (35°C).

## **Spray Equipment**

Airless spray equipment generates very high fluid pressure. Spray equipment must be properly maintained and operated. Any misuse of spray equipment or accessories (such as over-pressurizing, modified parts, or worn or damaged parts) can result in serious bodily injury, fire, explosion, or property damage. Read and follow the equipment manufacturer's instructions and recommendations.

Airless spray pump must have minimum 3,000 psi output pressure rating and adequate delivery volume to support the spray tip orifice gallons per minute rating. High-pressure airless sprayers with a higher maximum pressure capability will allow spray application in cold weather or when using spray hose lengths greater than 200 ft. (60.96 meters). Also, due to Energizer products being fibered, operate the sprayer without a strainer to avoid plugging the pump.

## **Spray Pump Recommendations**

- 1. Pump ratio 45:1
- Hose 1/2" ID Hose first 100 ft. (30.48m) with swivel connections and 3/8" ID Hose for second 100 ft. (30.48m)
- 3. Pressure 3,000 psi
- 4. Working pressure is 2,000 to 3,000 at the gun. Depending on equipment setup, you may be able to spray the coating as low as 1,800 psi. Based on tip size, raise pressure to remove fingers in spray pattern
- 5. High pressure fittings, rated for the capacity of the pump.
- Input flow 100 psi
- 7. Tip = 0.061-0.069 for a 16 in. pattern at 18 in. distance (40.64 cm pattern 45.72 cm distance)
- 8. Recommended 12 in. (30.48 cm) extension with swivel tip
- 9. Tip and pump sizes will change depending on temperature and pattern concerns.

#### **Spraying Technique**

- Hold the spray gun perpendicular to the surface at a distance of 18 in. to 24 in. (46 cm to 62 cm) from the roof. While triggering the spray gun, move it at a rate to produce the desired coating wet mil thickness without thin spots or "holidays." Spray technique should include a "half lap" technique where each spray pass is overlapped 50% for uniform coverage. Check applied film thickness using a wet mil gauge.
- Using the 2,700-3,000 psi fluid pressure will provide a uniform spray pattern without fingering.

### **Spraying Precautions**

- 1. Rope off the area within 150 ft. (45.72 m) of spray area.
- 2. Seal off ventilation intakes within the affected area.

# **CLEAN UP**

- 1. Clean airless spray equipment with aromatic solvent. Re-circulate aromatic solvent through pump supply line, airless spray pump, spray hose and spray to remove residual coating. Then, flush with clean aromatic solvent.
- Do not leave material in airless spray system overnight. Under certain conditions, it is possible for these coatings to jell or harden inside the equipment.
- 3. For long-term storage, a final flush with mineral spirits is recommended.
- For further details, consult with technical support or sales representative.
- 5. Properly dispose clean up solvent to a designated facility.

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## **Protection Equipment**

- In case of insufficient ventilation, wear a positive-pressure supplied-air respirator.
- 2. Fabric coveralls are recommended.
- 3. Impervious gloves are recommended.

# STORAGE AND HANDLING

## Storage

- Keep containers closed; store in a dry cool place away from heat, sparks, open flame and moisture.
- 2. For cold weather application, keep material stored above 70°F (21°C).
- 3. Open containers should be blanketed with dry nitrogen before resealing.

## Mixing

- 1. Settling or separation may occur upon storage.
  - b. Mix material before using to assure uniform consistency. Use Jiffy mixer for open head drums.
  - $\ensuremath{\text{c}}$  . Ground container and equipment to prevent accumulation of static charge.