



Fight fire with **PHOS-CHEK®**

PHOS-CHEK® 259-F Long-Term Fire Retardant

Low Viscosity Powder Concentrate



Description

Phos-Chek 259-F fire retardant is a highly soluble powder that mixes readily with water by recirculation, agitation or with Phos-Chek eductor-mixer and hopper-mixer systems. Phos-Chek 259-F produces a fugitive (F) color solution that maintains visibility during application, but slowly fades during exposure to sunlight.

Phos-Chek 259-F produces a gum thickened, low-viscosity fire retardant solution that provides highly effective and accurate aerial drops. The elastic nature of the thickener in Phos-Chek 259-F facilitates increased fuel coverage, wrap around and penetration through canopy and ladder fuels to ground vegetation. Phos-Chek 259-F exhibits extremely low corrosion in most metals including magnesium.

Uses

Phos-Chek 259-F fire retardant is qualified by the USDA Forest Service under Specification 5100-304c for use in all types of delivery systems, including fixed-wing air tankers, helicopters with fixed tanks or buckets, and ground engines. Phos-Chek 259-F is specially formulated to meet stringent magnesium corrosion requirements and is, consequently, *the ONLY retardant qualified for use in helicopters equipped with fixed tanks.*

Phos-Chek fire retardants are used for wildland fire control in forest, brush or grassland. Functionally, Phos-Chek retardants react with and alter the thermal decomposition of wildland fuels so that they do not support flaming or glowing combustion. This deprives the fire of fuel, reducing fire intensity and the rate of flame spread. They are useful as well in prescribed burning. When applied at low application rates, fire intensity is dramatically decreased while slow burning is allowed.

Phos-Chek 259-F can be supplied for use in helicopter operations at a fixed base, or for use in MRB operations to provide forward attack support. ICL MRB units can support multiple air or air crane operations and can mix up to 50,000 gallons of Phos-Chek 259-F per hour.



Packaging

Phos-Chek 259 is available in 2000 lbs. Phos-Bin containers, 2000 lbs. bulk bags, and 50 lbs. pails. Special package sizes available.

| Product Characteristics | |
|-------------------------|----------------------------------|
| Color | Fugitive (F) |
| Mix Ratio | 1.14 lbs./gal. of water |
| | 0.137 kg per liter |
| Yield | 1869 gal. per ton of concentrate |
| | 8.90 lbs./gal. (mixed retardant) |
| Specific Gravity | 1.075-1.085 (mixed retardant) |
| Viscosity | 100-400 centipoise (cP) |
| Refractometer | 12.25-14.50 (mixed retardant) |



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Always use the right tool for the job

| Application | Long-Term Retardant | Gel | Class A Foam | Water |
|---|---------------------|------|--------------|-------|
| Indirect Attack | ✓✓✓✓ | ✓✓ | ✓ | |
| Direct/Parallel Attack | ✓✓✓✓ | ✓✓✓ | ✓✓ | ✓ |
| Interior Structure Attack | | ✓✓ | ✓✓✓✓ | ✓ |
| Structure Protection-Indirect Application | ✓✓✓✓ | ✓✓✓ | ✓✓ | ✓ |
| Structure Protection-Direct Application | | ✓✓✓✓ | ✓✓✓ | ✓ |
| Mop Up | ✓✓ | ✓✓ | ✓✓✓✓ | ✓ |
| Prescribed Burn Control | ✓✓✓✓ | ✓✓✓ | ✓✓ | ✓ |

✓✓✓✓ = Superior Effectiveness ✓✓✓ = Excellent Effectiveness ✓✓ = Good Effectiveness ✓ = Baseline Effectiveness

Handling Precautions

- For detailed safety information, please refer to the MSDS.
- This product is moderately irritating to the eyes and is slightly irritating to the skin. Prolonged contact with the skin may result in drying or chapping.
- **Precautionary Measures:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary contact and removal of the material from the eyes, skin and clothing.
- This product may cause allergic reaction. Contains guar gum which may cause respiratory tract irritation.
- Protected storage is recommended for the product if it is to be stored for an extended period of time.
- **Eye Protection:** As a good industrial practice, the use of chemical goggles is recommended. Eye flushing equipment should also be available. **If in eyes:** Flush with plenty of water for at least 15 minutes.
- **Skin Protection:** Wear protective clothing and chemical resistant gloves when handling concentrate. Exposed skin should be washed as soon as possible.
- **Respiratory Protection:** Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection with airborne exposure is excessive.
- For complete MSDS, visit www.phoschek.com.

For more information, contact any of our worldwide ICL Fire Safety offices.

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