

RP INDUSTRIAL SUPPLY

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SPRAYER REQUIREMENTS — BANFIRE AND FP50CC

Dual-use equipment guidance · FR-BAN fabric saturant · FIRE POLY™ FP50CC foliage coating

Issued 1 September 2026. **Approved for RPIS field use 1 September 2026.** This is **RPIS equipment guidance compiled from Flame Safe / RDR published application notes** and the controlling RPIS specification-and-application sheets. It is **not a manufacturer endorsement of any sprayer brand, model, or retailer**. Flame Safe, RDR Technologies, and the coating manufacturers do not certify hardware. AHJ acceptance of the treated article is separate from this equipment note. Jeffrey has selected a preferred dual-use battery backpack (see **RPIS Recommended Equipment**). A companion shopping shortlist of currently listed USA retail examples remains issued separately — those other listings are examples, not a required buy list.

1. Purpose — one kit that can serve both products

RP Industrial Supply sells **FR-BAN (BanFire)**, a water-based saturant for absorbent fabric, and **FIRE POLY™ FP50CC**, a water-based intumescent coating for interior plastic foliage. The liquids are not interchangeable and must not be mixed. They can share a hardware class if the sprayer meets the intersection of the published notes: adjustable flow / mist, water-based compatibility, plastic and/or stainless wetted parts, and a fine-mist path for small-medium work. Do not store leftover liquid in the sprayer. Do not run BanFire and FP50CC through the same unflushed tank.

RPIS RECOMMENDED EQUIPMENT — dual-use battery backpack

Jeffrey selected / RPIS preferred: Milwaukee M18 SWITCH TANK 4-Gallon Backpack Sprayer Kit, model **3019-21PS**. Adjustable **20–140 psi** — low for BanFire mist/dampen, high for the FP50CC ≥80 psi pump/air path. Use the **adjustable/cone mist nozzle**. Separate SWITCH TANK assemblies or a thorough flush between BanFire and FP50CC. **Not an airless 515 tip** (that tip is Path 2, BanFire large-area fabric only). Full kit notes in §4.

2. What each manufacturer actually published

2.1 FIRE POLY™ FP50CC (Flame Safe) — foliage coating

Water-based intumescent coating for interior artificial plants, foliage, decorations, and artificial Christmas trees. Milky when wet; dries clear; becomes insoluble when dry. Do not dilute. Do not mix with any other product.

Sprayer class (published)	Standard trigger sprayer on mist setting (quart bottle), or pump / air sprayer at ≥ 80 psi (5.5 bar) .
Standoff	Hold the head 8–12 inches / 200–300 mm from the surface. Start at trunk/core, work outward; start at the bottom, work up so undersides are wetted.
Wetted parts	Contact parts stainless steel or plastic — not reactive bare steel. Prevents chemical reaction and breakdown of the coating.
Storage of liquid	Store remaining liquid in polyethylene . Do not leave product in a metal tank.
Cleanup	Flush with clean water until sudsing stops. Optional residue rinse: 1 part bleach to 4 parts water , then water again. Lubricate per equipment maker if the unit has metal pump parts.
Film, not hardware	Finished film 150–200 ft² per U.S. gallon (3.68–4.91 m²/L), one or two spray passes. Ponding dries as white dots. Thin coats beat a single flood.

2.2 FR-BAN · BanFire (RDR Technologies) — fabric saturant

Water-based amino-salt saturant for absorbent interior fabric, paper, and cardboard. Not a paint and not an intumescent coating. Must penetrate. Do not dilute. Use at 100%. Quart bottles ship with a trigger sprayer.

Sprayer class (published)	Simple spray bottle / trigger sprayer, pump-up garden sprayer, or painter's airless .
Airless note (RDR)	A standard 515 airless tip works well. For tall theater curtains a three-foot extension wand is very handy. Flush the airless with clean water immediately after use.
Flow / wetness	Adjustable flow. Spray until the fabric is damp — do not pool . Multiple light coats are better than fewer heavy coats. Vertical hanging usually avoids white puddle rings.
Coverage (two coats)	RDR published average ~400 sq ft per U.S. gallon with two coats (~100 sq ft per quart).

3. Shared dual-use requirements (the intersection)

TWO PATHS — DO NOT CONFLATE THEM

Path 1 — Trigger / pump mist (covers both products for small-medium jobs). Quart trigger on mist, or a 1–2 gal poly pump sprayer with an adjustable cone/mist nozzle. This is the dual-use default.

Path 2 — Airless 515 (BanFire / large-area fabric). Painter's airless with a standard 515 tip and, for tall curtains, a ~3 ft extension. This path is more BanFire than FP50CC. Airless is overkill for quarts and is not the Flame Safe mist method for foliage.

FP50CC pump/air class: if you leave the trigger-mist path, Flame Safe calls for **≥ 80 psi (5.5 bar)**. Typical garden pump-ups are 40–60 psi — they serve BanFire, but they do not meet the FP50CC 80 psi pump/air clause. Use trigger mist, or a published ≥80 psi pump/air/battery unit, for foliage coating.

Shared requirement	Why it is shared	Fail if...
Adjustable flow / mist capable	FP50CC: mist, not stream. BanFire: dampen fabric, don't pool. Both want thin, even wetness.	Fixed jet/stream only; no mist setting; foam-only nozzle with no cone/mist option.
Suitable for water-based chemicals	Both liquids are aqueous. Seals (nitrile/Viton/EPDM) and tanks must tolerate water-based salts/resins. Flush after every session.	Solvent-only guns; units that forbid waterborne coatings; leftover product left in the tank.
Wetted parts plastic and/or stainless	Flame Safe: stainless or plastic, not reactive bare steel. BanFire is less strict but the same hardware should not rust into either liquid.	Bare carbon-steel pump, tank, or siphon. Uncoated iron wands in the fluid path.
Fine mist AND enough pressure for foliage	Prefer models that can do a fine mist <i>and</i> , in the pump/air class, ≥80 psi for FP50CC foliage film. Trigger-mist quarts already satisfy FP50CC without 80 psi.	Pump/air unit used on FP50CC at unknown or <80 psi with no trigger-mist fallback.
Polyethylene storage of leftover liquid	Flame Safe: store liquid in polyethylene. BanFire quarts are already poly. Decant leftover from the sprayer back to original or HDPE/PE bottles.	Storing either chemical in a metal tank, aluminum cup, or the sprayer between jobs.
Flush after use	BanFire: clean water. FP50CC: water, optional 1:4 bleach rinse, water again. Dedicated sprayers per product are preferred on commercial kits.	Cross-running BanFire and FP50CC in one dirty tank; bleach left sitting in seals.

4. RPIS Recommended Equipment

Preferred dual-use battery backpack for **BanFire (FR-BAN)** fabric saturant and **FIRE POLY™ FP50CC** foliage coating. This is RPIS field-equipment preference after Jeffrey's selection. It is **not** Flame Safe or RDR certification of the hardware. Rated fire performance still belongs to the applied product at published coverage.

Item	RPIS preferred dual-use backpack
Kit (Jeffrey selected)	Milwaukee M18 SWITCH TANK 4-Gallon Backpack Sprayer Kit — model 3019-21PS.
Why this kit	One battery backpack that covers both published paths: a fine mist that can be turned down to dampen BanFire fabric without pooling, and a published top end above 80 psi for the FP50CC pump/air foliage clause. SWITCH TANK lets you isolate chemistries with a second tank assembly instead of sharing a dirty tank.
Pressure	Adjustable 20–140 PSI (5-mode). Low (near 20 psi / light flow) for BanFire mist/dampen. High (≥ 80 psi, typically mid-upper modes) for FP50CC foliage. Constant pressure; no manual pump-up.
Nozzle	Use the adjustable / cone mist nozzle . Mist, not stream, foam, or shower. Hold 8–12 inches off fabric or leaf. Do not fit an airless 515 tip on this unit — 515 is Path 2 (painter's airless, BanFire large-area fabric only).
Tanks / flush	Separate tanks or a thorough flush between BanFire and FP50CC. Prefer a second SWITCH TANK sprayer tank assembly (49-16-19PS), labeled BanFire vs FP50CC. If one tank is used: empty, flush to clear water (FP50CC: water, optional 1:4 bleach, water again) before switching. Do not store leftover liquid in the tank.
Wetted class	Poly / SWITCH TANK assembly; Viton seals; dual-diaphragm pump. Plastic fluid path with chemical-resistant seals — not reactive bare steel. Flush dry after use.

Family note. Older SWITCH TANK kit **2820-21PS** was published **20–120 psi**. That unit still clears the FP50CC ≥ 80 psi clause at the top of the dial. Current preferred kit is **3019-21PS (20–140 psi)**.

4.1 Buy paths — Option A (120 V AC) and Option B (240 V AC)

Label clearly: **Option A = 120 V AC** (kit 3019-21PS / charger 48-59-1812). **Option B = 240 V AC** (M12-18C article 4932352959; DFC 4932472074 as KSA dual-bay alternate). **International carton = 3019-20PS tool-only** + the buyer uses the Option B charger link. M18 battery packs are the same globally; source locally or as a separate lithium shipment. Do **not** claim 48-59-1812 is 240 V. A plug adapter is not a voltage converter. Use these URLs — do not invent ASINs. Confirm live price/stock before quoting.

Path	What to buy
Option A — 120 V AC (North America)	Full kit WITH battery + 120 V charger : Milwaukee 3019-21PS . Included charger: M12 & M18 Multi-Voltage Charger 48-59-1812 — 120 V AC only . "Multi-Voltage" = M12 and M18 packs, not AC 120/240. Included pack: M18 REDLITHIUM XC3.0 48-11-1828 . For 120 V sites only. Do not plug 48-59-1812 into 220–240 V mains.
Option A — buy links	Amazon: https://www.amazon.com/Milwaukee-Electric-4-Gallon-Backpack-Sprayer/dp/B0FGHHDSCD Home Depot kit: https://www.homedepot.com/p/Milwaukee-M18-18V-4-Gal-Cordless-Battery-Powered-Backpack-Pesticide-Sprayer-Kit-w-Switch-Tank-Interchangeable-Capability-3019-21PS/330529528 Manufacturer: milwaukeetool.com product 3019-21PS.
International carton (required if shipping the sprayer from the US internationally)	Buy US TOOL ONLY , no battery, no charger: Milwaukee 3019-20PS . Do not put the US 120 V charger (48-59-1812) in the international carton. Do not ship or use 48-59-1812 on 220–240 V mains — a plug adapter is not enough. Buyer MUST use the Option B 240 V charger link. Source the M18 pack locally or as a separate lithium shipment.
International — buy links	Home Depot tool-only: https://www.homedepot.com/p/Milwaukee-M18-18V-4-Gal-Cordless-Battery-Powered-Backpack-Pesticide-Sprayer-w-Switch-Tank-Interchangeable-Capability-Tool-Only-3019-20PS/330529510 Manufacturer: milwaukeetool.com product 3019-20PS (tool only; battery and charger sold separately).
Option B — 240 V charger (primary)	Preferred analog to 48-59-1812: Milwaukee M12-18C , 240 V, article 4932352959 . Amazon UK: https://www.amazon.co.uk/Milwaukee-M12-18-M12-charger-rechargeable-Black/dp/B019DW4NS0 Power Tools UK: https://www.powertoolsuk.co.uk/milwaukee-m12-18c-charger.html Milwaukee Tool AE catalog class M12-18 C: https://ae.milwaukeetool.eu/ar-ae/m12-m18-charger/m12-18-c/

Path	What to buy
Option B — KSA dual-bay (optional, not required)	KSA-listed 240 V Type G dual-bay: Milwaukee M18 DFC Dual Bay Rapid Charger 4932472074 (GB 240 V). Amazon.sa: https://www.amazon.sa/en/Milwaukee-Dual-Rapid-Charger-4932472074/dp/B08H5ND8RD KSA wall is Type G; UK/GB SKUs match. EU Type C/F 220–240 V chargers need a plug adapter only (voltage is already correct).

CHARGING — OPTION A = 120 V · OPTION B = 240 V · INTERNATIONAL = TOOL-ONLY

Option A — 120 V AC: kit **3019-21PS** / charger **48-59-1812** (120 V AC only). North America / 120 V sites.

Option B — 240 V AC: native 240 V Milwaukee M12-18C **4932352959** (Amazon UK / Power Tools UK / Milwaukee Tool AE). Optional KSA Type G dual-bay: M18 DFC **4932472074** (Amazon.sa). Do **not** claim 48-59-1812 is 240 V.

International carton: 3019-20PS tool-only + buyer uses the Option B charger link. Do not ship the US 120 V charger. M18 packs are the same globally; only charger AC input differs.

Quart trigger sprayers remain the DIY default for small jobs. Painter's airless + 515 remains the BanFire large-area fabric option. Garden pump-ups at 40–60 psi remain BanFire-acceptable but do not meet the FP50CC ≥80 psi pump/air clause. This backpack is the preferred *one-kit* commercial dual-use choice.

4b. REQUIRED if using equivalent (not the Milwaukee kit)

A buyer who does **not** buy Milwaukee **3019-20PS** / **3019-21PS** cannot guess. These are **RPIS field-equipment requirements compiled from Flame Safe / RDR published notes** — **not** a manufacturer hardware certification. “Equivalent” means meeting **ALL** of the required items below. Another brand/model is allowed only if those specs are **published on the unit in hand**. Quart trigger-mist remains the DIY small-job path and is **NOT** this commercial equivalent. Fail the equivalent if any item is missing.

REQUIRED — fail the equivalent if any item is missing

- Adjustable pressure covering BOTH paths.** Low/mist for BanFire fabric (dampen, do not pool) **and** a published high setting ≥ **80 psi / 5.5 bar** for the FP50CC pump/air foliage path. Units with only 40–60 psi garden pump-up do **NOT** qualify as dual-use commercial equivalent.
- Adjustable cone/mist nozzle.** Not stream-only, not foam-only, not shower-only. Not an airless 515 tip on this path (515 is BanFire large-area airless Path 2 only).
- Suitable for water-based chemicals** (BanFire amino-salt saturant and FP50CC water-based intumescent). Seals nitrile/Viton/EPDM class. Flush after every session. Do not store leftover liquid in the sprayer.
- Wetted parts plastic and/or stainless steel** — not reactive bare carbon steel / uncoated iron in the fluid path.
- Polyethylene / HDPE tank** (or SWITCH TANK-class poly assembly). Store leftover liquid in polyethylene, not in a metal tank.
- Dedicated tank/assembly per chemistry OR a documented thorough flush** (FP50CC: water, optional 1:4 bleach, water again; BanFire: clean water). No cross-running BanFire and FP50CC in a dirty tank.
- If battery-powered: charger AC input MUST match site mains.** 120 V sites use Option A (48-59-1812). 220–240 V sites (including KSA) **MUST** use Option B native 220–240 V Milwaukee M12/M18 charger (or equivalent OEM 220–240 V charger for that battery platform). Do not plug a 120 V charger into 240 V. A plug adapter is not a voltage converter.
- Constant/adjustable powered pressure preferred** (no manual pumping required for the commercial dual-use path).

5. Minimum quart DIY vs recommended commercial kit

Item	Minimum — quart DIY (both SKUs)	Recommended — commercial kit
Job size	Quart BanFire (≤ ~100 sq ft fabric, two coats) and/or quart FP50CC (one typical 5-ft tree).	Gallons / 5-gal BanFire (curtains, rooms) and gallon/5-gal FP50CC (trees, beds, repeats).

Item	Minimum — quart DIY (both SKUs)	Recommended — commercial kit
Sprayer	Adjustable trigger sprayer on mist on a 32 oz / quart poly bottle. One bottle per product. Do not share an unflushed head.	Dedicated units: (1) quart trigger remaining for touch-up; (2) 1–2 gal poly pump for BanFire; (3) ≥80 psi pump/air or battery sprayer for FP50CC foliage; (4) optional airless + 515 + ~3 ft wand for tall fabric.
Pressure	Trigger mist — no 80 psi requirement. Hold 8–12 in off the leaf or fabric.	FP50CC pump/air path: ≥ 80 psi / 5.5 bar , adjustable down to a fine film. BanFire pump: 40–60 psi garden class is published-acceptable. Airless: follow the sprayer maker; use 515 tip.
Wetted parts	Plastic bottle, plastic trigger, plastic dip tube. No bare steel.	Polyethylene / HDPE tank; poly or stainless wand and shut-off; stainless needle/nozzle on any air gun. Brass cone tips are common on garden units — not bare steel; still flush dry.
Tips / nozzles	Twist nozzle: mist (not stream) for both products.	Adjustable poly cone (mist↔stream) on pump units. Airless: standard 515 (0.015 in orifice, ~10–12 in fan) per RDR. Keep a spare 515. ~30–36 in tip extension if a true 36 in wand is not listed.
Storage	Keep liquid in the original quart. Empty and rinse the sprayer the same day.	Polyethylene jugs/bottles only. Label BanFire vs FP50CC. Never store mixed leftovers.
Cleanup	Water flush. For FP50CC, optional 1:4 bleach then water. Air-dry the head.	Same, plus a written flush step on the job card. Airless: water immediately. Do not leave bleach in an airless pump. Dedicated hose/gun per chemistry if volume is high.
PPE / site	Gloves, eye protection. FP50CC: strong odor — outdoors or strong ventilation. BanFire: nearly odorless.	Same, plus respirator/mask on FP50CC per SDS and site rule. Drop cloths; protect flat latex paint (BanFire may spot).

6. Field method that works on both liquids

- **Do not dilute either product.** Do not mix them with each other or with paint, bleach, or water in the tank.
- **One chemistry per sprayer per session.** Flush to clear water before switching. Prefer two labeled sprayers on commercial work.
- **Set mist, not stream.** Hold 8–12 inches. For BanFire, dampen fabric — stop before pooling. For FP50CC, wet every plastic face without runs in the veins.
- **FP50CC:** one or two spray passes totaling 150–200 ft²/gal finished film. Dry to the touch between two passes. Keep dry 24 hours after the last pass.
- **BanFire:** two coats as published. Dry between coats. Thick goods: both sides. Velvet-like: heavier on the back, lighter on the front.
- **Airless (BanFire large area only):** 515 tip, reduce pressure until the fan is even without tails, keep the gun moving, flush with clean water before the pump dries.
- **Test a hidden area** (colorfastness on fabric; bloom/white on foliage) before the public face.

7. What this sheet does not do

NOT A BRAND ENDORSEMENT — NOT AN AHJ SUBMITTAL

§4 names an **RPIS-preferred** dual-use backpack (Milwaukee 3019-21PS kit / 3019-20PS tool-only) as field equipment. That is RPIS guidance, **not** a Flame Safe or RDR hardware certification, and it does not certify that any retail model will produce the rated fire film or NFPA 701 / ASTM E84 result. Those results belong to the **applied product at the published coverage**, not to the hardware.

Do not write this equipment note as Flame Safe or RDR approval of a gun, tip, or store. Do not present airless application of FP50CC as the manufacturer foliage method. Confirm local fire-marshall / AHJ acceptance of the treated article separately.

Sources compiled: Flame Safe Fire Poly FP50CC application notes (80 psi or greater sprayer; 8–12 in; stainless or plastic contact parts; polyethylene storage; water then optional 1:4 bleach flush). RDR Technologies BanFire application notes (trigger, pump-up garden, or painter's airless; standard 515 tip; 3-ft extension for tall curtains; dampen, don't pool; flush airless with clean water). RPIS-EPC FP50CC Specification and Application (issued 28 August 2026). RPIS-EPC FR-BAN Specification and Application (issued 31 August 2026).

Companion files: RPIS shopping shortlist (approved 1 September 2026) of currently listed USA retail examples (Jeffrey selected 3019-21PS / 3019-20PS as the dual-use backpack; remaining listings are examples). Original manufacturer TDS / SDS / lot documents still travel with the goods.