

## Clean Agent Hand Portable Extinguishers

### Features

- Meets or exceeds requirements of ANSI/UL 2129, 711 and CAN/ULC S508 and S566
- Listings and approvals include UL and ULC
- Simple operation and maintenance
- Trilingual, glare-resistant, one-piece mylar nameplate (English, French, and Spanish)
- Rechargeable
- Manufactured of durable high-quality materials
- Operating temperature range is -40 °F to 120 °F (-40 °C to 49 °C)
- Large, easy-to-read pressure gauge
- Six-year limited warranty from date of delivery to original end-user purchaser
- Sold and serviced through a network of independent distributors
- Recharge tank, FK-5-1-12 agent

### Applications

CLEANGUARD+ extinguishers are designed for the protection of light and ordinary hazards. These compact and portable extinguishers are designed for commercial and compliance fire protection needs. CLEANGUARD+ extinguishers can be used in the following applications:

- Computer rooms
- Essential communication areas
- Irreplaceable data, document, and art storage rooms
- Laboratories
- Sensitive and irreplaceable equipment

### Description

- CLEANGUARD+ shells are produced by a single-step cold deep draw process that yields a seamless steel cylinder with an extremely high tensile strength.
- Unique pre-treatment of the raw low carbon steel not only consists of a cleaning process, but also applies a special lubricant which helps keep the interior and exterior shell surfaces scratch-free.
- The collar and specially preformed bottom enclosure are MIG welded to produce a smooth, high integrity weld.
- The extinguisher shells are 100% factory air tested in excess of 600 psi (41.4 bar).



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- Custom designed shot blaster is used to obtain a white metal finish on the exterior of the shell. The blasting process removes surface contaminants and provides a textured surface which promotes paint adhesion.
- Proprietary metal finishing equipment and a two-coat powder paint system is superior to conventional liquid and powder paint systems. The equipment and the two-coat system work together to maximize the properties of each paint.
- The specially formulated two-coat powder paint system is electrostatically applied and cured in infrared ovens. First, an epoxy primer is applied for maximum corrosion resistance and adhesion. Then, to resist fading, cracking, and chipping, a super durable polyester top coat is applied.
- Easy grip extinguisher handles designed for maximum portability, allow operators to fight the fire without removing work gloves.
- CLEANGUARD+ extinguisher valve bodies are made from a durable extruded aluminum alloy which has been black anodized for additional corrosion resistance.
- Completed valve assemblies feature plated steel valve stems which contain o-ring and seat material compatible with the FK-5-1-12 agent to provide reliable performance and long life.
- Rugged all-steel pick-up tubes help provide proper and dependable agent flow through the valve body.
- Aluminum alloy hose ferrules are protected with a corrosion-resistant coating.
- CLEANGUARD+ extinguishers have large, color-coded pressure gauges which provide a quick visual indication of unit readiness.

## Description (Continued)

- Metal ring pins are utilized and held in place by a visual seal to help prevent accidental discharges
- One-piece trilingual mylar nameplate with easy-to-read pictograms provides the user with step-by-step operating instructions and the hazard classes for which the extinguisher was designed. The nameplate also contains useful recharge, inspection, operating temperatures, and model information.
- Large, easy-to-scan QR coded model and UL/ULC serial numbers simplify inspection and maintenance record keeping.
- CLEANGUARD+ valve subassemblies are 100% tested for functionality before final assembly.
- CLEANGUARD+ extinguishers are filled at the factory to precise tolerances.
- Pressurized and 100% leak tested utilizing mass spectrometry technology.
- Anodized metal nozzle tips are designed to tight specifications and maximize the suppression capabilities of the particular model.
- CLEANGUARD+ extinguishers are shipped from the factory in individual recyclable corrugated cardboard cartons. Designed and field tested to help assure your extinguishers arrive undamaged and ready for operation.

## FK-5-1-12 clean agent

FK-5-1-12 is a colorless, odorless, electrically non-conductive clean agent which discharges as a liquid and flashes to a gas, providing an increased effective firefighting range. FK-5-1-12 agent does not cause thermal shock damage to delicate electronic equipment.

Safe for sensitive electronic components. FK-5-1-12 agent is electrically non-conductive and residue-free.

**EPA/SNAP Acceptance.** FK-5-1-12 agent has been accepted by the EPA for commercial, industrial, and military use under the EPA's SNAP program. It boasts zero Ozone Depletion Potential, <1 global warming potential, and a five day atmospheric lifespan.

FK-5-1-12 agent has very low toxicity levels. The Lowest Observable Adverse Effects Level (LOAEL) of FK-5-1-12 agent is 10%, well above its suppressing concentration. Other agents have LOAEL levels of only 1% or 2%, which is below their suppressing concentrations.

A recharge tank (Part No. 445054) containing FK-5-1-12 agent is available for servicing CLEANGUARD+ hand portable extinguishers.

## Listings

CLEANGUARD CA03, CA07, CA13, and CA25 extinguishers are UL and ULC listed.



## Approvals

CLEANGUARD CA07, CA13, and CA25 extinguishers are approved by the US Coast Guard for use on marine vessels with the approved bracket.

## Ordering information

For fire protection assistance, contact your nearest Authorized Distributor.

## Specifications

CLEANGUARD+ Extinguishers					
		012027	012028	012029	012188
<b>Model</b>		CA03VB	CA07	CA13	CA25
<b>Domestic Part No.</b>		443475	443476	443477	443478
<b>International Part No.</b>		443577	443578	443579	439124
<b>Bracket Part No.</b>		24610 – Included	429146	435793	30937
<b>Agent capacity</b>		3.5 lb (1.59 kg)	7.5 lb (3.4 kg)	13.0 lb (5.9 kg)	27.75 lb (12.6 kg)
<b>Charged weight</b>		6.08 lb (2.76 kg)	12.12 lb (5.5 kg)	20.08 lb (9.11 kg)	39.84 lb (18.07 kg)
<b>Discharge time</b>		8.9 s	8.2 s	10.7 s	18 s
<b>Agent flow rate</b>		0.46 lb/s (0.21 kg/s)	1.12 lb/s (0.51 kg/s)	1.43 lb/s (0.65 kg/s)	1.68 lb/s (0.76 kg/s)
<b>Approvals and listings</b>		UL/ULC	UL/ULC/USCG	UL/ULC/USCG	UL/ULC/USCG
<b>USCG classification (marine)</b>		–	Type B:C Size I	Type B:C Size I	Type B:C Size I
<b>UL and ULC Rating</b>		2-B:C	5-B:C	1-A:10-B:C	2-A:10-B:C
<b>Effective range</b>		8 ft to 10 ft (2.4 m to 3.1 m)	8 ft to 10 ft (2.4 m to 3.1 m)	10 ft to 12 ft (3.1 m to 3.7 m)	14 ft to 16 ft (4.3 m to 4.9 m)
<b>Dimensions</b>	<b>Height</b>	14 1/4 in. (362 mm)	16 3/4 in. (425 mm)	20 1/2 in. (520 mm)	23 7/8 in. (606 mm)
	<b>Width</b>	5 3/4 in. (146 mm)	8 1/2 in. (216 mm)	8 1/4 in. (210 mm)	9 3/4 in. (248 mm)
	<b>Depth</b>	3 3/8 in. (86 mm)	4 7/16 in. (113 mm)	5 1/4 in. (133 mm)	7 3/8 in. (187 mm)
<b>Fire Suppression Capability</b>					
	<b>UL Panel Class A</b>	N/A	N/A	8 ft x 8 ft (2.4 m x 2.4 m) Panel	10 ft x 10 ft (3.1 m x 3.1 m) Panel
	<b>Novice Operator** Class B</b>	2 ft <sup>2</sup> (0.19 m <sup>2</sup> )	5 ft <sup>2</sup> (0.47 m <sup>2</sup> )	10 ft <sup>2</sup> (0.93 m <sup>2</sup> )	10 ft <sup>2</sup> (0.93 m <sup>2</sup> )
	<b>Experienced Operator Class B</b>	5 ft <sup>2</sup> (0.47 m <sup>2</sup> )	12.5 ft <sup>2</sup> (1.2 m <sup>2</sup> )	25 ft <sup>2</sup> (2.32 m <sup>2</sup> )	25 ft <sup>2</sup> (2.32 m <sup>2</sup> )

**Notes:** \*International model part numbers are used for shipping outside of the United States per GHS Labelling Requirements.

\*\* Underwriters Laboratories classifies a novice operator as one who has little or no experience in operating a fire extinguisher.

Hydrostatic Test Requirements: Once every 12 years (all models)

## Clean Agent Comparison

Suppressing agent	FK-5-1-12	HALOTRON BrX™	HALOTRON I
Chemical family	FK	(2-BTP)	HCFC
Acute toxicity: Cardiotox LOAEL (Lowest Observable Adverse Effects Level) <b>Note:</b> A higher % is less toxic	10%	1%	2%
Acute toxicity: Cardiotox NOAEL (No Observable Adverse Effects Level) <b>Note:</b> A higher % is less toxic	< 10%	0.5%	1%
Minimum volume of room for approved use (Per UL 1093 and 2129) <b>Note:</b> Volumes must be larger for more toxic agents	2-B:C 40.3 ft <sup>3</sup> (1.1m <sup>3</sup> ) 5-B:C 86.3 ft <sup>3</sup> (2.44 m <sup>3</sup> ) 1-A:10-B:C 149.6 ft <sup>3</sup> (4.2 m <sup>3</sup> ) 2-A:10-B:C 319.3 ft <sup>3</sup> (9.04 m <sup>3</sup> )	427 ft <sup>3</sup> (12.1 m <sup>3</sup> ) 896 ft <sup>3</sup> (25.4 m <sup>3</sup> ) 2988 ft <sup>3</sup> (84.6 m <sup>3</sup> )	350 ft <sup>3</sup> (9.9 m <sup>3</sup> ) 700 ft <sup>3</sup> (19.8 m <sup>3</sup> ) 1540 ft <sup>3</sup> (43.6 m <sup>3</sup> ) 2170 ft <sup>3</sup> (61.4 m <sup>3</sup> )
Hazardous Material Identification System (HMIS)	Health: 1 – Slight Flammability: 1 – Slight Reactivity: 1 – Slight	1 – Slight 0 – Minimal 1 – Slight	1 – Slight 0 – Minimal 1 – Slight
Agent Quantity Required to Achieve Rating	2-B:C 3.5 lb (1.59 kg) 5-B:C 7.5 lb (3.4 kg) 1-A:10-B:C 13 lb (5.9 kg) 2-A:10-B:C 27.75 lb (12.6 kg)	1.8 lb (0.81 kg) 3.75 lb (1.7 kg) 12.5 lb (5.7 kg)	2.5 lb (1.13 kg) 5 lb (2.3 kg) 11 lb (5.0 kg) 15.6 lb (7.1 kg)
Scheduled Raw Material Production Phase-Out Per Montreal Protocol or AIMS Act	None	Nonchargeable agent	Recycled only available
Ozone Depletion Potential – ODP (CFC-11 = 1.0)	0	0.0028	0.014
Global Warming Potential – GWP	< 1	0.26	Low
Atmospheric Lifetime	0.014 years	0.013 years	1.3 years

Safety Data Sheets (SDS) are available at [www.FireProductSDS.com](http://www.FireProductSDS.com)

**Note:** The converted metric values in this document are provided for dimensional reference only and do not reflect an actual measurement.

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