

# ANSUL<sup>®</sup> CleanGuard<sup>®</sup> Fire Extinguishers

with DuPont FE-36<sup>™</sup> Clean Extinguishing Agent



**CLEANGUARD<sup>®</sup>**  
fire extinguishers  
offer the superior  
performance and reliability  
you expect from Ansul products.  
DuPont<sup>™</sup> FE-36<sup>™</sup> replaces  
Halon 1211 as the agent-of-choice  
for applications where the agent must  
be clean, electrically nonconductive,  
environment-friendly, extremely low in  
toxicity and exceptionally effective.

## FE-36™ Agent...The Responsible Choice.

**Exceptionally effective fire extinguishant.** The extinguishing concentration (cup burner) of FE-36 is only 5.9% – and because it discharges as a liquid, it also provides an effective discharge range up to 16 ft. (4.9 m).

**Safe for sensitive electronic components.** FE-36 is electrically nonconductive, residue-free, and will not cause thermal shock damage.

**EPA/SNAP Acceptance.** FE-36 has been accepted by the EPA for commercial, industrial, and military use under the EPA's SNAP program. It boasts ZERO Ozone Depletion Potential and is **NOT** scheduled for phase-out by the Montreal Protocol.

**Very low toxicity.** The Lowest Observable Adverse Effects Level (LOAEL) of FE-36 is 15%, well above its extinguishing concentration. Other agents have LOAEL's of only 1% or 2% which is actually below their extinguishing concentrations.

The bottom line: **FE-36 is the safest Halon 1211 replacement on the market today.**





### Clean Agent Comparison

EXTINGUISHING AGENT	FE-36	HALOTRON I	HALON 1211
<b>Chemical Family</b>	HFC	HCFC	BCFC
<b>Acute Toxicity: Cardiotox LOAEL (Lowest Observable Adverse Effects Level)</b> <i>A higher % is less toxic.</i>	15%	2%	1%
<b>Acute Toxicity: Cardiotox NOAEL (No Observable Adverse Effects Level)</b> <i>A higher % is less toxic.</i>	10%	1%	0.5%
<b>Minimum volume of room for approved use (Per UL 1093 and 2129)</b> <i>Volumes must be larger for more toxic agents.</i>	2-B:C 5-B:C 1-A:10-B:C 2-A:10-B:C	39 cu. ft. (1.1 m <sup>3</sup> ) 73 cu. ft. (2.1 m <sup>3</sup> ) 146 cu. ft. (4.1 m <sup>3</sup> ) 204 cu. ft. (5.8 m <sup>3</sup> )	350 cu. ft. (9.9 m <sup>3</sup> ) 700 cu. ft. (19.8 m <sup>3</sup> ) 1540 cu. ft. (43.6 m <sup>3</sup> ) 2170 cu. ft. (61.4 m <sup>3</sup> )
<b>Hazardous Material Identification System (HMIS)</b>	Health: Flammability: Reactivity:	1 - Slight 0 - Minimal 1 - Slight	1 - Slight 0 - Minimal 1 - Slight
<b>Agent Quantity Required to Achieve Rating</b>	2-B:C 5-B:C 1-A:10-B:C 2-A:10-B:C	2.5 lbs. (1.13 kg) 4.75 lbs. (2.2 kg) 9.5 lbs. (4.3 kg) 13.25 lbs. (6.0 kg)	2.5 lbs. (1.13 kg) 5 lbs. (2.3 kg) 11 lbs. (5.0 kg) 15.5 lbs. (7.0 kg)
<b>Extinguishing Concentration, Cup Burner, n-heptane</b>	5.9%	6-7%	4-5%
<b>Scheduled Raw Material Production Phase-Out per Montreal Protocol *</b>	None	-100% in 2015	-100% by 1994
<b>Ozone Depletion Potential – ODP (CFC-11 = 1.0)</b>	0	0.014	4
<b>Global Warming Potential – GWP</b>	Moderate	Low	N/A
<b>Atmospheric Lifetime</b>	Moderate	Low	Low

\* Refers to primary component: HCFC-123.

## CLEANGUARD® Extinguishers...QUALITY in The Ansul Tradition.

- Meets FAA minimum performance standard (MPS) for handheld fire extinguishers on civilian transport category aircraft.
- Listed by Underwriters' Laboratories (UL) and Underwriters' Laboratories of Canada (ULC).
- Approved by U.S. Coast Guard (USCG) with brackets listed below.
- Seamless, welded steel shell is 100% hydrotested and 100% leak tested.
- Tough polyester-urethane powder paint resists blistering, cracking, fading, chipping, and corrosion.
- Extruded aluminum valve is anodized for corrosion resistance and contains a durable steel pick-up tube and plated steel valve stem, ring pin, and chain.
- Glare-resistant Mylar nameplate features bar-coded serial number/model.
- Six-year limited warranty from date of delivery to original end-user purchaser.

<b>CLEANGUARD® EXTINGUISHER SPECIFICATIONS</b>		 003538	 002721	 002722	 002723
<b>Model</b>		FE02VB	FE05	FE09	FE13
<b>Ext. Part No. (UL)</b>		429107	429020	429021	429022
<b>Ext. Part No. (ULC)</b>		429596	429597	429598	429599
<b>Bracket Part No.</b>		24610 (Included)	429146	422737	30937
<b>Agent Capacity</b>		2.5 lb. (1.13 kg)	4.75 lb. (2.2 kg)	9.5 lb. (4.3 kg)	13.25 lb. (6 kg)
<b>Charged Weight</b>		5.0 lb. (2.26 kg)	9.5 lb. (4.3 kg)	21.81 lb. (9.89 kg)	25.63 lb. (11.63 kg)
<b>Discharge Time</b>		9 seconds	8.6 seconds	9.5 seconds	13.5 seconds
<b>Agent Flow Rate</b>		0.30 lb./sec. (.14 kg/sec.)	0.60 lb./sec. (.27 kg/sec.)	1.15 lb./sec. (.52 kg/sec.)	1.12 lb./sec. (.51 kg/sec.)
<b>USCG Classification (Marine)</b>		N/A	Type B:C, Size I	Type B:C, Size I	Type B:C, Size I
<b>Listings / Approvals</b>		UL/ULC	UL/ULC/FAA	UL/ULC/FAA	UL/ULC/FAA
<b>UL/ULC Rating</b>		2-B:C	5-B:C	1-A:10-B:C	2-A:10-B:C
<b>Effective Range</b>		8-10 ft. (2.4-3.1 m)	10-12 ft. (3.1-3.7 m)	14-16 ft. (4.3-4.9 m)	14-16 ft. (4.3-4.9 m)
<b>Dimensions</b>	<b>Height</b>	14 1/4 in. (362 mm)	17 in. (432 mm)	18 3/4 in. (476 mm)	22 1/2 in. (572 mm)
	<b>Width</b>	5 3/4 in. (146 mm)	8 1/2 in. (216 mm)	9 in. (229 mm)	9 1/2 in. (241 mm)
	<b>Depth</b>	3 3/8 in. (86 mm)	4 7/16 in. (113 mm)	7 in. (178 mm)	7 in. (178 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 sq. ft. (.19 sq. m)	5 sq. ft. (.47 sq. m)	10 sq. ft. (.93 sq. m)	10 sq. ft. (.93 sq. m)
	<b>Experienced Operator Class B</b>	5 sq. ft. (.47 sq. m)	12.5 sq. ft. (1.2 sq. m)	25 sq. ft. (2.3 sq. m)	25 sq. ft. (2.3 sq. m)

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

## Extinguisher Application

CLEANGUARD extinguishers are designed for the protection of commercial and industrial facilities traditionally protected by Halon 1211. Typically, these are areas that contain sensitive or irreplaceable equipment which could be damaged or destroyed by water, foam, dry chemical, or carbon dioxide. Typical applications include computer centers, data/document storage areas, communications facilities, control rooms, electronics manufacturing, museums, art galleries, laboratories, and many others.

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## For More Information...

Check your Yellow Pages for your Ansul Authorized Distributor – or call us direct – and we'll put you in touch with the Ansul representative in your area.

USA/CANADA

**1-800-TO-ANSUL**

**Fax: 1-715-732-3608**

INTERNATIONAL

**1-715-735-7411**

**Fax: 1-715-732-3477**

INTERNET HOME PAGE

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*Innovative Fire Solutions*