



To measure the power or intensity of fire and the power of an extinguisher needed to kill that fire, a universally accepted method of testing is formulated.

These tests are called Fire Rating tests.

### How are Fire Ratings arrived at?

Standards define a highly specific method of lighting a fire and then putting it out using an extinguisher to assess the extinguisher's fire ratings in case of both, Class A and Class B Fire ratings. Each test fire is designated by a number (which indicates a fire size) followed by the letter A, which denotes class of fire.





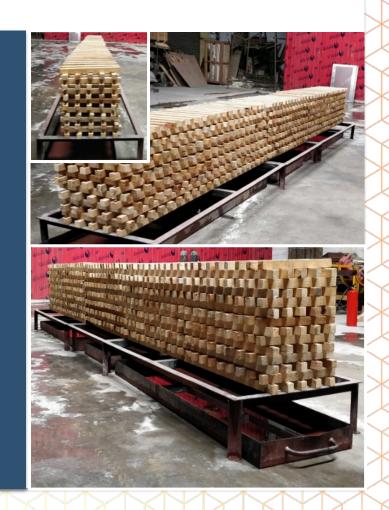
### **Class A Fire Rating Test**

#### **Preparation**

A specific variety of wood is selected with specific density & moisture content and is cut into pieces to form a crib.

This crib is constructed with precise parameters of spacing between two pieces, height, length and width basis the size of the fire and corresponding fire rating test.

This crib is then placed on top of a metal frame of a specific height. A metal tray is placed under the crib that stores the fuel for lighting the fire.

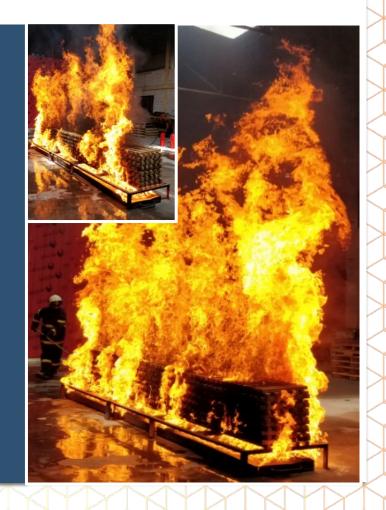


### Class A Fire Rating Test

#### **Test Procedure**

Fuel in the tray under the crib is ignited. After the fire has burnt for a specified duration the tray is removed. The crib is then permitted to burn for a further specified time period for the fire to be established fully.

The fire extinguisher is put into action at this point and the operator discharges the extinguisher in the best possible way to ensure maximum extinguishing power.

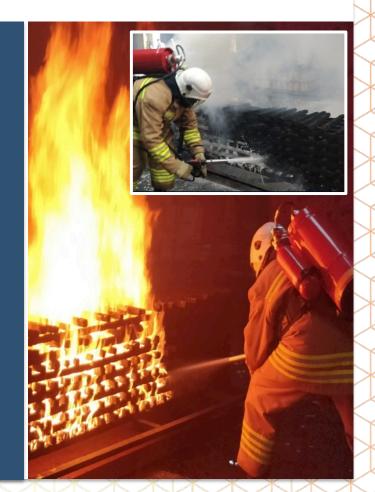


### Class A Fire Rating Test

#### **Test Procedure**

The maximum extinguishing time should not exceed a specific time period prescribed. In all cases the fire shall be observed for 3 min from that point.

For the test to be successful, all flames must be extinguished and there should be no reoccurrence of flames in the 3 min observation period.



### **Class B Fire Rating Test**

#### **Preparation**

A circular metal tray of a prescribed volume is used to store fuel i.e. Heptane fuel and water is used.

The radius of tray is given by the square root of the rating number in decimeters

For example, for 55B fires the radius of the tray is square root of 55 i.e 7.4 decimeters or 74 centimeters approx.





### Class B Fire Rating Test

#### **Preparation**

There is a specific method to determine the volume of Heptane (Fuel) required. For example- for 55B fire it is derived by 2/3rd of 55 ltr (36.7lts) an the balance is water (18.33ltr)

Other dimensions of the tray and fuel are also kept very specific depending upon the size of fire and corresponding ratings. These include the depth of fuel & water in the tray, the height from the surface of the fuel to the rim, etc.



### Class B Fire Rating Test

#### **Test Procedure**

The fuel is now ignited and to allowed to burn for a specified time period.

At this point the fire extinguisher is pressed into action.

If the fire gets extinguished and there is no reoccurrence of flames, the fire extinguisher passes the test.





### **Class F Fire Rating Test**

#### **Preperation**

The Class F Fire Rating test is required to be done indoors, in a room of a specified dimensions and with a specified ambient temperature.

The test is required to be done Vegetable Oil with an auto ingnition point of not less than 360 Degrees Celsius.

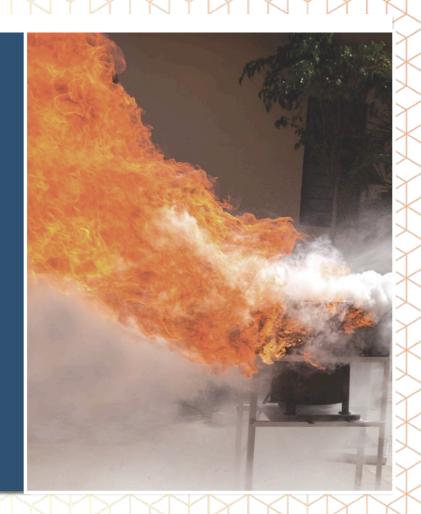


## **Class F Fire Rating Test**

#### **Test Procedure**

The Oil is heated in a test tray using a suitable heating arrangement.

Oil temperature must be measured using a specially designed thermometer at a point that is 25mm below oil surface and at least 75mm from the walls of the tray.



### Class F Fire Rating Test

#### **Test Procedure**

On auto ignition, the fire is allowed to burn freely for 2 minutes.

After 2 minutes of pre-burn, the extinguisher is put to action and fired from the distance specified in the extinguisher, but the distance should not be lesser than 1m from the nozzle and the tray.

Fire must be completely extinguished to pass the test.



# Indian standards (BIS) and European standards (EN) on Fire Ratings.

Both, Indian Standards (BIS) as well as European Standards (EN) have laid out extremely comprehensive test procedures to conduct fire rating tests on extinguishers.



# Class A Fire Rating Test parameters as per Indian Standards (BIS)

	Type of Wood used as Fuel				ruction of CRIB			Moisture Content of Wooden Stick	Wooden CRIE Arranger		Support for CRIB
		Number of Pieces of Wood	Wooden stick cross sectional sides.	Length of Pieces of Wood in Mm	Arrangement of Pieces of Wood	Minimum Air Inlet Opening Surface Area in m2	Shape of CRIB		Ignition Pan Size mm	Heptane Charge It	
1A		72	37 ± 1	500	12 layers of 6 pieces of wood	0.10			400 × 400 × 100	1.1	Construct the crib on two 63 mm × 38 mm angle irons or
2A		144	38 ± 1	635	16 layers of 7 pieces of wood	0.10	All cribs are cubic with the volume of the open space		535 × 535 × 100	2	other similar and appropriate
ЗА	PinusSylve stris /		39 ± 1	735	18 layers of 8 pieces of wood	0.15		10 percent to 14 percent by	635 × 635 × 100	2.8	supports, placed on concrete
4A	Cryptomeri a Japonica	180	40 ± 1	800	20 layers of 9 pieces of wood	0.20		mass (dry basis).	700 × 700 × 100	3.4	blocks or support frame so as the
6A		230	41 ± 1	925	23 layers of 10 pieces of wood	0.30	approximat ely equal to the		825 × 825 × 100	4.8	height of the supports above the floor is 400 ± 10
10A		324	42 ± 1	1 100	27 layers of 12 pieces of wood	0.40	volume of the wood.		1 000 ×1 000 × 100	7	mm.
15A		450	43 ± 1	1 190	30 layers of 15 pieces of wood	0.50			1 090 × 1 090 × 100	7.6	
20A		561	44 ± 1	1 270	33 layers of 17pieces of wood	0.60			1 170 × 1 170 × 100	8.2	

# Class A Fire Rating Test parameters as per Indian Standards (BIS)

Fire Ratings with respect to minimum sizes of various extinguishing agents

Extingui	shing Medium Conten	t (Charge)	
Powder KG	Water/Foam/ Water Mist Litre	Clean Agent KG	Minimum Class A Rating
≤ 2	≤ 6	≤ 6	1A
>2, ≤ 4	> 6, ≤ 10	>6, ≤ 8	2A
>4, ≤ 6	> 10	>8	3A
> 6, ≤ 9			4A
>9			6A

# Class B Fire Rating Test parameters as per Indian Standards (BIS)

Class and Size of Fire	Minimum Discharge time of Extinguishers in seconds	Volume of Liquid1)lt	Volume of water in liter	Volume of Fuel in liter	Dimens	ions of Test Fi	ire Tray	Approximate Surface Area of Fire m2	Fuel Type
					Diameter2) mm	Internal Depth3)in mm	Minimal Thickness of Walls in mm		
8B <sup>3)</sup>	-	8	2.67	5.33	570 ± 10	150 ± 5	2	0.25	
13B <sup>3)</sup>	-	13	4.33	8.67	720 ± 10	150 ± 5	2	0.41	
21B	8	21	7.00	14.00	920 ± 10	150 ± 5	2	0.66	
34B	8	34	11.33	22.67	1170 ± 10	150 ± 5	2.5	1.07	Use n Heptane having an initial
55B	9	55	18.33	36.67	1480 ± 15	150 ± 5	2.5	1.73	boiling point of not less than 88°C and a final
(70B)	9	70	23.33	46.67	(1670 ± 15)	(150 ± 5)	2.5	-2.2	boiling point of notmore than
89B	9	89	29.67	59.33	1890 ± 20	200 ± 5	2.5	2.8	105°C.
(113B)	12	113	37.67	75.33	(2130 ± 20)	(200 ± 5)	2.5	3.55	
144B	15	144	48.00	96.00	2400 ± 25	200 ± 5	2.5	4.52	
(183B)	15	183	61.00	122.00	(2710 ± 25)	(200 ± 5)	2.5	5.75	
233B	15	233	77.67	155.33	3000 ± 30	200 ± 5	2.5	7.32	

# Class B Fire Rating Test parameters as per Indian Standards (BIS)

Fire Ratings with respect to minimum sizes of various extinguishing agents

	Extinguishing M	edium Content (Cha	arge)	
Carbon Dioxide KG	Powder KG	Water/Foam/ Water Mist Litre	Clean Agent KG	Minimum Class B Rating
≤ 2	≤ 2	-	≤ 2	13
>2, < 5	>2, < 3	< 3	>2, ≤ 4	21
> 5	≥ 3, ≤ 4	≥ 3, ≤ 6	>4, ≤ 6	34
_	>4, ≤ 6	>6, ≤ 9	>6	55
_	> 6	>6, ≤ 9	-	89

# Class F Fire Rating Test parameters as per Indian Standards (BIS)

Class & Size of Fire	Volume of cooking oil in test fire in (Litres)	Test Apparatus	Fuel Type
5F Minimum	5 +1/0	Type A 300 mm	Vegetable Oil
15F	15 +1/-0	Type-B X=448 mm Y=224 mm	Vegetable Oil
25F	25 +1/-0	Type-B X578 mm Y=289 mm	Vegetable Oil
75F	75 +1/-0	Type-B X=1000 mm Y=500 mm	Vegetable Oil

# Class A Fire Rating Test parameters as per European Standards (EN)

Class and Size of Fire	Types of Wood used as Fuel		Construc	ction of CRIB		Moisture Content and Identiy of Wooden Stick	Wooden CRIB ignition Arrangement	Support for Crib
		Number of tranverse sticks	Length of transverse sticks in mm. i.e <b>Depth of</b> <b>crib.</b>	Number of longitudinal sticks. Placed perpendicula rly to tranverse sticks.	Length of longitudinal sticks. Placed perpendicularly to tranverse sticks. Varies according to fire size*decimeter. Length In M			
5A		5	500	5	0.5	The wooden		Class A test fires shall
8A		8	500	5	0.8	sticks shall be of Pinus silvestris		consist of a crib of wooden sticks
13A		13	500	5	1.3	containing	A metal Lighting tray	supported on a metal frame
21A		21	500	5	2.1	of moisture by mass	with a width of	
27A	The wooden sticks shall be of Pinus	27	500	5	2.7	when determined	depth of 100 mm shall be	and of a length equal to that of
34A	silvestris.	34	500	5	3.4	in accordance	used .The length of tray	the test fire (see Figure I.1).
43A		43	500	5	4.3	with Annex J. The	shall be 100 mm greater	The metal frame shall be
55A		55	500	5	5.5	density of the wood shall be 0,40 kg/dm3 to 0,65 kg/dm3		constructed from angle sections (L ´W) (50 ´50) mm as specified in ISO 657-1.

# Class A Fire Rating Test parameters as per European Standards (EN)

Fire Ratings with respect to minimum duration of operation & sizes of various extinguishing agents

FIRE RATING	Minimum duration of operation in Sec	Nominal permitted charges powder in Kg	Minimum duration of operation in seconds	Nominal permitted charges of water/foam in Lt
5A	6	1	6	2, 3
8A	6	1, 2	9	2, 3, 6
13A	9	1, 2, 3, 4	9	2, 3, 6, 9
21A	9	1, 2, 3, 4, 6	9	2, 3, 6, 9
27A	9	1, 2, 3, 4, 6, 9	12	2, 3, 6, 9
34A	12	1, 2, 3, 4, 6, 9	15	2, 3, 6, 9
43A	15	1, 2, 3, 4, 6, 9, 12	15	2, 3, 6, 9
55A	15	1, 2, 3, 4, 6, 9, 12	15	2, 3, 6, 9



# Class B Fire Rating Test parameters as per European Standards (EN)

Class and Size of Fire	Fuel Type	Fuel & W	/ater Specifi	cations		Dimensi	ons of tray		Minimum duration of operation		nsions of Test Chambers
		Volume of liquid Lt	Water 1/3 totalvolum e in Lt		Internal diameter at rim in mm	Depth in mm	Thickness of walls in mm	Approximate area of fire in m <sup>2</sup>		height	Minimum side length (tray x 4) and 7,5 m whichever is the greatest (m)
21B	The fuel for the class B test fires	21	7.0	14.0	920 ± 10	150 ± 5	2,0	0,66	6	4,6	7,5
34B	shall be industrial heptane	shall be industrial		22.7	1 170 ± 10	150 ± 5	2,5	1,07	6	5,8	7,5
55B	which shall have the	55	18.3	36.7	1 480 ± 15	150 ± 5	2,5	1,73	9	7,4	7,5
70B	following characteristi cs:	70	23.3	46.7	1 670 ± 15	150 ± 5	2,5	2,20	9	8,3	7,5
89B	<b>Distillation</b> <b>curve</b> : 84 °C to 105 °C;	89	29.7	59.3	1 890 ± 20	200 ± 5	2,5	2,80	9	9,4	7,5
113B	Difference between initial and	113	37.7	75.3	2 130 ± 20	200 ± 5	2,5	3,55	12	10,6	8,5
144B	final points of distillation: £	144	48.0	96.0	2 400 ± 25	200 ± 5	2,5	4,52	15	12,0	9,6
183B	Aromatic content (V/V):	183	61.0	122.0	2 710 ± 25	200 ± 5	2,5	5,75	15	13,5	10,8
233B	£ 1 %; Density at 15 °C 0.680 to		77.7	155.3	3 000 ± 30	200 ± 5	2,5	7,32	15	15,2	12,2

# Class B Fire Rating Test parameters as per European Standards (EN)

Fire Ratings with respect to minimum duration of operation & sizes of various extinguishing agents

Designation of test fire	Minimum duration of operation in seconds	Nominal permitted charges powder in Kg	Minimum duration of operation in seconds	Nominal permitted charges water/ foam in Lt	Minimum duration of operation s	Nominal permitted charges Co <sup>2</sup> in Kg
21B	6	1	-	-	6	2
34B	6	1, 2	6	2	6	2
55B	9	1, 2, 3	9	2, 3	9	2, 5
70B	9	1, 2, 3, 4	9	2, 3	9	2, 5
89B	9	1, 2, 3, 4	9	2, 3	9	2, 5
113B	12	1, 2, 3, 4, 6	12	2, 3, 6	12	2, 5
144B	15	1, 2, 3, 4, 6, 9	15	2, 3, 6	15	2, 5
183B	15	1, 2, 3, 4, 6, 9, 12	15	2, 3, 6, 9	15	2, 5
233B	15	1, 2, 3, 4, 6, 9, 12	15	2, 3, 6, 9	15	2, 5

# Class F Fire Rating Test parameters as per European Standards (EN)

Rating	Volume of cooking oil in test fire (I)	HEIGHT CONTAINER in mm	INTERNAL CONTAINER in mm	INTERNAL CONTAINE R in mm	t ht in	MOC of container steel sheet, mm thick	charges	Minimum duration of operations in seconds	Fuei
5F	5 (+1 –0)	170 +/- 10	Dia	Dia	150 +/- 10	(2,0 ± 0,25)	2, 3	6	Vegetable
25F	25 (+1 –0)	250 +/- 10	L = 578	W = 289	750 +/- 12	(2,0 ± 0,25)	2, 3, 6	9	oil with auto ignition
40F	40 (+1 –0)	251 +/- 10	L = 600	W = 450	750 +/- 12	(2,0 ± 0,25)	2, 3, 6, 9	12	temperatur e 330 to 380 degree
75F	75 (+1 –0)	252 +/- 10	L = 1 000	W= 500	750 +/- 12	(2,0 ± 0,25)	2, 3, 6, 9	15	centigrade.



# What really makes a difference is adherence to the protocol during tests.

Indian Standards (BIS) and European Standards (EN) have both laid out their unique method of fire rating tests.

While both standards are largely similar in-principle, the real difference lies in how closely the standards are guarded and not compromised at the time of carrying out the tests.



# At Ceasefire we carry out our EN Rating Tests in European union certified labs.

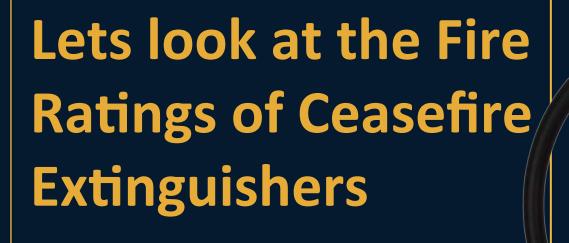
While there are lot of private labs in India which carry out Fire Rating tests, the standards and procedures where are often compromised, at Ceasefire thanks to our European Certification requirements, all our rating tests are conducted only in European Union certified labs.

This lends tremendous credibility to our ratings as compared to what's offered by the industry.











Brand		ABC P	owder		Clean Agent			Water		Foam		C	CO2	
Name	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg	
CEASEFIRE	3A,70B	4A, 144B	6A, 183B	6A, 233B	21B	1A,34B	2A,34B	3A	4A	3A, 144B	4A, 233B	34B	55B	

# When compared with what's available in the industry...



















Brand Name		ABC Po	wder		Cl	ean Age	ent	Wa	iter	Fo	am	C	<b>D2</b>
Dialla Naille	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg
Safex	1A, 8B	2A, 34B	4A, 55B	6A,89B	8B	1A,13B	21B		2A		4A, 89B	13B	21B
Kannex	1A, 21B	2A, 34B	3A, 55B	4A,89B	1A,13B	1A,21B	1A,34B	2A	2A	1A, 13B	2A, 21B	8B	21B
Supermax	1A, 13B	2A, 21B	3A, 21B	6A, 144B	1A,8B	1A,13B	2A,21B	2A	3A	2A, 34B	3A, 55B	8B	34B
Minimax	1A, 8B	2A, 55B	3A, 21B		1A,8B	1A,13B	1A,21B		2A		2A, 21B	8B	13B
Excellent Engineering	8B		3A, 21B						2A		3A, 13B	8B	21B
Fireshield Engg Equipment	1A, 8B	1A, 13B	2A, 21B	3A,34B					3A		3A, 34B	8B	13B
Intime Fire Appliances	1A, 8B	2A, 21B	3A, 34B							2A, 21B	4A, 34B		
Lifeguard Unitex	2A, 13B	3A, 21B	3A, 34B	4A,55B	1A, 8B,C	2A, 13B,C	3A, 21B,C	2A	3A	2A, 21B	3A, 55B	8B	21B
Safeguard	2A, 13B	2A, 21B	3A, 21B	4A,34B				3A	4A	2A, 21B	4A, 34B	8B	21B
Superex Kaynap	1A, 8B	2A, 21B	3A, 21B	4A,34B				1A	2A	1A, 21B	2A, 34B	8B	21B
CEASEFIRE	2A,70B	4A, 144B	6A, 183B	6A, 233B	21B	1A,34B	2A,34B	3A	4A	3A, 144B	4A, 233B	34B	55B

<sup>\*</sup> Source: Manufacturer's websites and brochures

Brand Name		Cl	ean Age	ent	Water		Foam		CO2				
branu Name	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg
Safex	1A, 8B	2A, 34B	4A, 55B	6A,89B	8B	1A,13B	21B		2A		4A, 89B	13B	21B
Kannex	1A, 21B	2A, 34B	3A, 55B	4A,89B	1A,13B	1A,21B	1A,34B	2A	2A	1A, 13B	2A, 21B	8B	21B
Supermax	1A, 13B	2A, 21B	3A, 21B	6A, 144B	1A,8B	1A,13B	2A,21B	2A	3A	2A, 34B	3A, 55B	8B	34B
Minimax	1A, 8B	2A, 55B	3A, 21B		1A,8B	1A,13B	1A,21B		2A		2A, 21B	8B	13B
Excellent Engineering	8B		3A, 21B						2A		3A, 13B	8B	21B
Fireshield Engg Equipment	1A, 8B	1A, 13B	2A, 21B	3A,34B					3A		3A, 34B	8B	13B
Intime Fire Appliances	1A, 8B	2A, 21B	3A, 34B							2A, 21B	4A, 34B		
Lifeguard Unitex	2A, 13B	3A, 21B	3A, 34B	4A,55B	1A, 8B,C	2A, 13B,C	3A, 21B,C	2A	3A	2A, 21B	3A, 55B	8B	21B
Safeguard	2A, 133	2A, 21B	3A, 21B	4A,34B				3A	4A	2A, 21B	4A, 34B	8B	21B
Superex Kaynap	1A, 8B	2A, 21B	3A, 21B	4A,34B				1A	2A	1A, 21B	2A, 34B	8B	21B
CEASEFIRE	2A,70B	4A, 144B	6A, 183B	6A, 233B	21B	1A,34B	2A,34B	3A	4A	3A, 144B	4A, 233B	34B	55B

Upto 6 times more

\* Source: Manufacturer's websites and brochures

Brand Name		Cl	ean Age	ent	Water		Foam		CO2				
branu Name	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg
Safex	1A, 8B	2A, 34B	4A, 55B	6A,89B	8B	1A,13B	21B		2A		4A, 89B	13B	21B
Kannex	1A, 21B	2A, 34B	3A, 55B	4A,89B	1A,13B	1A,21B	1A,34B	2A	2A	1A, 13B	2A, 21B	8B	21B
Supermax	1A, 13B	2A, 21B	3A, 21B	6A, 144B	1A,8B	1A,13B	2A,21B	2A	3A	2A, 34B	3A, 55B	8B	34B
Minimax	1A, 8B	2A, 55B	3A, 21B		1A,8B	1A,13B	1A,21B		2A		2A, 21B	8B	13B
Excellent Engineering	8B		3A, 21B						2A		3A, 13B	8B	21B
Fireshield Engg Equipment	1A, 8B	1A, 13B	2A, 21B	3A,34B					3A		3A, 34B	8B	13B
Intime Fire Appliances	1A, 8B	2A, 21B	3A, 34B							2A, 21B	4A, 34B		
Lifeguard Unitex	2A, 13B	3A, 21B	3A, 34B	4A,55B	1A, 8B,C	2A, 13B,C	3A, 21B,C	2A	3A	2A, 21B	3A, 55B	8B	21B
Safeguard	2A, 13B	2A, 21B	3A, 21B	4A,34B				3A	4A	2A, 21B	4A, 34B	8B	21B
Superex Kaynap	1A, 8B	2A, 21B	3A, 21B	4A,34B				1A	2A	1A, 21B	2A, 34B	8B	21B
CEASEFIRE	2A,70B	4A, 144B	6A, 183B	6A/ 233B	21B	1A,34B	2A,34B	A	4A	3A, 144B	4A, 233B	34B	55B

Upto 2.5 times more

Brand Name		ABC Po	wder		Cl	ean Age	ent	Wa	iter	Foam		CO2	
branu Name	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg
Safex	1A, 8B	2A, 34B	4A, 55B	6A,89B	8B	1A,13B	21B		2A		4A, 89B	13B	21B
Kannex	1A, 21B	2A, 34B	3A, 55B	4A,89B	1A,13B	1A,21B	1A,34B	2A	2A	1A, 13B	2A, 21B	8B	21B
Supermax	1A, 13B	2A, 21B	3A, 21B	6A, 144B	1A,8B	1A,13B	2A,21B	2A	3A	2A, 34B	3A, 55B	8B	34B
Minimax	1A, 8B	2A, 55B	3A, 21B		1A,8B	1A,13B	1A,21B		2A		2A, 21B	8B	13B
Excellent Engineering	8B		3A, 21B						2A		3A, 13B	8B	21B
Fireshield Engg Equipment	1A, 8B	1A, 13B	2A, 21B	3A,34B					3A		3A, 34B	8B	13B
Intime Fire Appliances	1A, 8B	2A, 21B	3A, 34B							2A, 21B	4A, 34B		
Lifeguard Unitex	2A, 13B	3A, 21B	3A, 34B	4A,55B	1A, 8B,C	2A, 13B,C	3A, 21B,C	2A	3A	2A, 21B	3A, 55B	8B	21B
Safeguard	2A, 13B	2A, 21B	3A, 21B	4A,34B				3A	4A	2A, 21B	4A, 34B	8B	21B
Superex Kaynap	1A, 8B	2A, 21B	3A, 21B	4A,34B				1A	2A	1A, 21B	2A, 34B	8B	21B
CEASEFIRE	2A,70B	4A, 144B	6A, 183B	6A, 233B	21B	1A,34B	2A,34B	ЗА	4A	3A, 144B	4A, 233B	34B	55B

Upto 6 times more

Brand Name		ABC Po	wder		Cl	ean Age	ent	Water		Foam		CO2	
Brand Name	2kg	4kg	6kg	9kg	2kg	4kg	6kg	6ltr	9ltr	6ltr	9ltr	2kg	4.5kg
Safex	1A, 8B	2A, 34B	4A, 55B	6A,89B	8B	1A,13B	21B		2A		4A, 89B	13B	21B
Kannex	1A, 21B	2A, 34B	3A, 55B	4A,89B	1A,13B	1A,21B	1A,34B	2A	2A	1A, 13B	2A, 21B	8B	21B
Supermax	1A, 13B	2A, 21B	3A, 21B	6A, 144B	1A,8B	1A,13B	2A,21B	2A	3A	2A, 34B	3A, 55B	8B	34B
Minimax	1A, 8B	2A, 55B	3A, 21B		1A,8B	1A,13B	1A,21B		2A		2A, 21B	8B	13B
Excellent Engineering	8B		3A, 21B						2A		3A, 13B	8B	21B
Fireshield Engg Equipment	1A, 8B	1A, 13B	2A, 21B	3A,34B					3A		3A, 34B	8B	13B
Intime Fire Appliances	1A, 8B	2A, 21B	3A, 34B							2A, 21B	4A, 34B		
Lifeguard Unitex	2A, 13B	3A, 21B	3A, 34B	4A,55B	1A, 8B,C	2A, 13B,C	3A, 21B,C	2A	3A	2A, 21B	3A, 55B	8B	21B
Safeguard	2A, 13B	2A, 21B	3A, 21B	4A,34B				3A	4A	2A, 21B	4A, 34B	8B	21B
Superex Kaynap	1A, 8B	2A, 21B	3A, 21B	4A,34B				1A	2A	1A, 21B	2A, 34P	8B	21B
CEASEFIRE	2A,70B	4A, 144B	6A, 183B	6A, 233B	21B	1A,34B	2A,34B	3A	4A	3A, 144B	4A, 233B	34B	55B

Upto 4 times more

# The De-rating Factor

A very important aspect associated with Fire Ratings is the De-ratings factor which essentially highlights the fact that

fire tests are conducted in controlled lab environments where fires are fought with best fire extinguishers and highly trained fire fighters.

However, in real life fire emergencies it will be mostly untrained people in highly chaotic, fearful situations who will have to battle the flames. To compensate for the "amateur / untrained" aspect of the person fighting the flames in real life, the achieved ratings of the fire extinguishers must be De-rated by 2.5 times.



Ceasefire's 3X Ratings compensates for the amateur firefighter in you.



While other manufacturers only talk about their Fire Ratings obtained under test conditions (which too is upto 3 times lower than Ceasefire)

Ceasefire's 3 times higher Fire Ratings easily compensate for the "2.5 De-Rating Factor" so that you still have enough fire fighting power on your side to win your battle against fire.

## What is backing our extinguishers?



- A world class, fully integrated, manufacturing facility
- A production process that complies with the Factory production Control (FPC) requirements of the world's highest quality standards - EN3, EN1866, LPCB, BSI, PED.
- State-of-the-art deep draw station for container manufacturing

## What is backing our extinguishers?



- In-house valve manufacturing unit
- A fully automatic and dehumidified, agent filling station
- PESO approval for pressure filling
- Best in class paint shop
- Most advanced Quality control lab



#### Contininuos R&D

At the core of the Ceasefire promise is our massive investments in continuous R&D.

Our fire specialists, product engineers and technologists continuosly strive to develop newer, more powerful product solutions that are aimed at safeguarding a wide variety of high fire-risk spaces and establishmemnts.



Ceasefire extinguishers today meet, and in many cases surpassing, the most brutal test standards laid out in the world - EN3,7 to 8 and EN1866, IS15683 and IS16018.







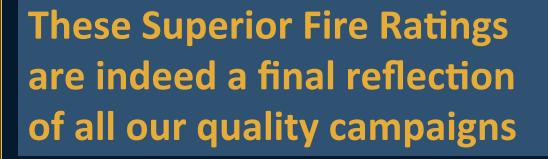












#### Why?

- Our products are manufactured to highest quality standards defined in the global fire safety markets
- Our productions today inherently complies to the Factory Production Control (FPC) requirements of the world's leading quality standards and agencies including EN, LPCB, BSI and PED.
- We are the only fire safety brand in India to offer a fire fighting range certified to both, Indian + European Standards
- Our overseas export quality is 100% the same as our domestic range.



