AFMER KİMYA INC.





# AFMER CHEMICAL

### FIRE FIGHTING CHEMICALS



### **ABOUT US**

Afmer Kimya has been providing professional support to Municipals, Fire Fighting Departments, Private Sectors and Corporate Fire Fighting Organizations with its proven fire fighting technology, foam, extinguishing chemicals and support services on national and international platforms since 2003.

### **Mission**

Our mission is to provide the best service to the society with our nature and environment friendly products that produce the best and fastest solutions for sectoral problems.



### **Vision**

Adopting the principle of periodically reviewing technological developments in order to meet customer expectations completely and on time, AFMER Kimya produces the fastest and most effective solutions in fire fighting with its high performance products.



### **Values**

AFMER Kimya is a company that cares about nature and public health with its fire extinguishing products and field studies without sacrificing quality.



### **ABOUT US**



























### AFOAM-SYNTHETIC 1-3-6%



#### **Description**

A FOAM-Synthetic % 1-3-6 Foam is specially formulated to make water more effective for fire fighting. The surfactants in A FOAM-Synthetic % 1-3-6 foam significantly reduce water's surface tension and, when mixed with air, create a superior foam blanket that surrounds fuels with a thick layer of water. This creates a barrier between the fuel and the fire, knocking down the fire faster than water alone, and allowing fire fighters to see the areas of application. Making the water more effective reduces the amount of water needed to extinguish the fire, reduces water damage and increases fire fighter safety through quicker knockdown and reduced mop-up/overhaul requirements.

#### **Typical Physiochemical Properties**

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Appearance	liquid
pH(20 oC)	7.1 ± 1
Viscosity(20 oC)	Min. 7 cP
Density(20 oC)	$1.03 \pm 0.02 \mathrm{gr/cm}3$
Storage Temperature	Min-15° $C$ ,Max+60 ° $C$
Surface Tension	$35 \pm 2  \text{mN/m 'dir.}$
Sediment(20 oC)	< %0,05
Recommended usage concentration	%1-3-6
Suitable for use with fresh or seawater.	
Burn-Back Resistance Level	С
Fire Fight Performance Class	ш
Pour Point	-12°C
Freze Point	-15°C

#### **Application**

A FOAM-Synthetic % 1-3-6 is highly effective for fighting Class A/B fires when mixed with water at use rates of % 1. It has proven effectiveness in many applications including Compressed Air Foam Systems (CAFS), structural firefighting, forest fire suppression and prescribed burning, mine fires, industrial Class A/B fires, and for extinguishing hydrocarbon spill fire



#### Approvals, Listings, and Standards

A FOAM-Synthetic % 1-3-6 is in conformity with all national and international standarts, EN 1568:2008 Part 1,Part2, Part 3, 96/98/EC directives Afmer Chemicals CO. operates a quality management system which complies with

#### **Foaming Properties**

A FOAM-Synthetic % 1-3-6 Concentrate may be effectively applied using most conventional foam discharge equipment at 1-3-6% dilution with fresh, salt,or hard water. For optimum performance, water hardness should not exceed 500 ppm expressed as calcium and magnesium.

A FOAM-Synthetic % 1-3-6 Concentrate requires low energy to foam and the foam solution may be applied with aspirating and non-aspirating dischargedevices.

High-expansion: 200:1-500:1 Midium-expansion: 20:1-200:1 Low expansion: 10:1-20:1

#### **Performance**

A FOAM-Synthetic % 1-3-6 is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. Performance Laboratories.

#### Compatibility

A FOAM-Synthetic % 1-3-6 is suitable for use in combination with:

- Soft or hard, fresh or seawater.
- Dry powder extinguishing agents either seperately or as twin agentsystems. -Expanded synthetic foams for application to a fire in sequence or simultaneously.

A FOAM-Synthetic properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

#### **Storage**

A FOAM-Synthetic %1-3-6 is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container. A FOAM-Synthetic %1-3-6 is suitable for storing steel tank body.

#### **Typical Packing Specification**

Plastic Drum Plastic Barrel IBC Bulk

Capacity	20 litres	30 litres	200 litres	1000 litres
Empty Weight (kg)	1.0	1.2	9.0	70
Filled Weight (kg)	21	32	210	1075
Dimensions (mm)	305 × 295 × 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H







### A FOAMF AFFF %1-3-6 FoamConcentrate



#### **Description**

A FOAM-%1-3-6 AFFF (Aqueous Film-Forming Foam) Concentrate combines fluoro- and hydrocarbon-surfactant technologies to provide superior fire and vapor suppression for Class B hydrocarbon fuel fires. This AFFF foam concentrate is intended for fire fighting applications at 1-3-6% solution in fresh, salt, or hardwater.

A FOAM- %1-3-6 AFFF foam solution utilizes three suppression mechanisms intended for rapid fire knockdown and superior burnback resistance:

The foam blanket blocks oxygen supply to the fuel.

Liquid drains from the foam blanket and forms an aqueous film that suppresses fuel vapor and seals the fuel surface.

The water content of the foam solution produces a cooling effectfor additional fire suppression.

#### Typical Physiochemical Properties

Appearance	Pale yellow liquid
pH(20 oC)	7.2 ± 1
Viscosity(20 oC)	Min. 3.0 cP
Density(20 oC)	$1.02 \pm 0.02 \mathrm{gr/cm3}$
Storage Temperature	$Min-15^{\circ}C$ , $Max+60^{\circ}C$
Surface Tension	$19 \pm 1  \text{mN/m'dir.}$
Sediment(20 oC)	< %0,0
Recommended usage concentration	%1-3-6
Suitable for use with fresh or seawater.	
Burn-Back Resistance Level	С
Fire Fight Performance Class	Ш
Frezee Point	-15°C

#### **Application**

A FOAM- %1-3-6 AFFF is used in high risk situations where hydrocarbons ( such as diesel fuel, gasoline, crude oil ) are stored, processed or transported.

A FOAM- %1-3-6 AFFF is desingned and recommended for fast fire knockdown to save human lives, in addition to preventing catastrophic fire development; in paticular when used in firefightingvecibles in the airports and fixed fire systems in heliports.

A FOAM- %1-3-6 AFFF can also be used as a wetting agent in combating A FOAM-1F Class A materials such as paper, wood, tires. It is most suitable for simultaneous use with compatible powders in twinagents or extinguishers.

A FOAM- %1-3-6 AFFF is principally recommended for protection against fire in:

- Airports and heliports
- Aircraft hangars
- Industrial chemical and petroleum processing facilities
- Truck/rail loading and unloading facilities
- Flammable liquid containment areas
- Hydrocarbon stroge tanks and power stations
- Mobile equipment
- Sprinkler Systems
- Loading Systems
- MarineTerminals and Vessels



#### Approvals, Listings, and Standards

A FOAM- %1-3-6 AFFF is in conformity with all national and international standarts, EN 1568:2018 Part 1,Part2, Part 3 directives Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2015.

#### **Foaming Properties**

A FOAM- %1-3-6 AFFF Concentrate may be effectively applied using most conventional foam discharge equipment at 1-3-6% dilution with fresh, salt, or hard water A FOAM- %1-3-6 AFFF Concentrate requires low energy to foam and the foam solution may be applied with aspirating and non-aspirating discharge devices. Non-aspirating devices, such as handline water fog/stream nozzles or standard sprinkler heads, typically produce expansion ratios from 2:1 to 4:1. Aspirating low-expansion discharge devices typically produce expansion ratios from 3.5:1 to 10:1, depending on the the type of device and the flow rate. Medium-expansion discharge devices typically produce expansion ratios from 20:1 to 60:1.

#### **Performance**

A FOAM- %1-3-6 AFFF is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. Performance Laboratories.

#### Compatibility

A FOAM- %1-3-6 AFFF is suitable for use in combination with :

- Soft or hard, fresh or seawater.
- Dry powder extinguishing agents either seperately or as twin agentsystems.
- -Expanded AFFF foams for application to a fire in sequence or simultaneously.

A FOAM- %1-3-6 AFFF properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

#### **Storage**

A FOAM- %1-3-6 AFFF is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container A FOAM- %1-3-6 AFFF is suitable for storing steel tank body.

#### Typical Packing Specification

	Plastic Drum		stic Drum Plastic Barrel	
Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight(kg)	1.0	1.2	9.0	70
Filled Weight(kg)	21	32	230	1075
Dimensions (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 Lx 1000 W x 1165 H







### A FOAM-FP 1-3-6% FoamConcentrate



#### **Description**

A FOAM-FP 1-3-6% is a protein foam concantrate contain hydrolysed protein and preservatives, together with a blend of surfactants to achieve the maximum synergistic effect. The blend of surfactants selected is effective in reducing the surface tension of water as well as the interfacial tension between water and oil sufficiently low to give stable film on the surface of the fuel and as a result it gives fire extinguishing rates superior to those obtained with synthetic based compounds.

#### **TypicalPhysiochemicalProperties**

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Appearance	Clear Brown liquid
pH(20 oC)	7.1± 1
Viscosity(20 oC)	Min. 5
Density(20 oC)	$1.03 \pm 0.03 \text{ gr/cm}3$
Storage Temperature	Min -15° $C$ ,Max+60 ° $C$
Sediment(20oC)	< %0,05
Recommended usage concentration	%1-3-6
Suitable for use with fresh or seawater.	
Burn-Back Resistance Level	С
Fire Fight Performance Class	Ш
Pour Point	- 12°C
Freze Point	-15°C

#### **Application**

A FOAM-FP 1-3-6% is used in high risk situations where hydrocarbons ( such as diesel fuel, gasoline, crude oil ) are stored, processed or transported A FOAM-FP 1-3-6% is desingned and recommended for fast fire knockdown to save human lives, in addition to preventing catastrophic fire development; in paticular when used in fire-fightingvecihles in the airports and fixed fire systems in heliports. A FOAM-FP 1-3-6% can also be used as a wetting agent in combating fires in Class A/B. It is most suitable for simultaneous use with compatible powders in twin-agents or extinguishers. A FOAM-FP 1-3-6% is principally recommended for protection against fire in:

- Airports and heliports
- Aircraft hangars
- Industrial chemical and petroleum processing facilities
- Truck/rail loading and unloading facilities
- Flammable liquid containment areas
- Hydrocarbon stroge tanks and power stations
- Mobile equipment
- Sprinkler Systems
- Loading Systems
- MarineTerminals and Vessels



#### Approvals, Listings, and Standards

A FOAM-FP 1-3-6% is in conformity with all national and international standarts, EN 1568:2018 Part 1,Part2, Part 3, Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2015.

#### **FoamingProperties**

A FOAM-FP 1-3-6% Concentrate may be effectively applied using most conventional foam discharge equipment at 1% dilution with fresh, salt, or hard water. For optimum performance, water hardness should not exceed 500 ppm expressed as calcium andmagnesium.

A FOAM-FP 1-3-6% Concentrate requires low energy to foam and the foam solution may be applied with aspirating and non-aspirating discharge devices.

Non-aspirating devices, such as handline water fog/stream nozzles or standard sprinkler heads, typically produce expansion ratios from 2:1 to 4:1. Medium-expansion discharge devices typically produce expansion ratios from 20:1 to 60:1.

#### **Performance**

A FOAM-FP 1-3-6% is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. PerformanceLaboratories.

#### Compatibility

A FOAM-FP 1-3-6% is suitable for use in combination with:

- Soft or hard, fresh or seawater.
- Dry powder extinguishing agents either seperately or as twin agentsystems.
- -Expanded FP foams for application to a fire in sequence or simultaneously.

A FOAM-FP 1 $^{'}\!\!-\!\!3\text{-}6\%$  properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

#### **Storage**

A FOAM-FP 1-3-6% is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container. A FOAM-FP 1-3-6% is suitable for storing steel tankbody.

#### **TypicalPackingSpecification**

Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight (kg)	1.0	1.2	9.0	70
Filled Weight (kg)	21	32	230	1075
Dimensions(mm)	305 x 295 x 333	380 x 300 x 360	585 D x945 H	1200 L x 1000 W x 1165 H







# A FOAM-AR 1-3-6% AFFF AR FoamConcentrate

### Chemical Fires

#### **Description**

A FOAM-1-3-6AR (Alcohol Resistant Aqueous Film-Forming Foam) concentrates are high-performance, firefighting AR-AFFF concentrates formulated with hydrocarbon and fluorosurfactants, fluoropolymers and water-soluble polysaccharide polymers. When A FOAM-1-3-6AR is applied to a water-soluble fuel, a polymeric membrane is formed between the foam and the fuel.

When the foam is applied to a hydrocarbon fuel, a film is created at the fuel/air interface, similar to AFFF. Also like AFFF, AR-AFFF inhibits vapor release and provides a foam blanket cooling effect in the suppression of both types of Class B fires.

#### **TypicalPhysiochemicalProperties**

Appearance	Pale Yellow liquid
pH(20 oC)	7.2 ± 1
Viscosity(20 oC)	Min 300 cP
Density(20 oC)	$1.03 \pm 0.01 \mathrm{gr/cm3}$
Storage Temperature	$Min\text{-}15^{\circ}\mathit{C}$ , $Max\text{+}60^{\circ}\mathit{C}$
Surface Tension	$19 \pm 2  \text{mN/m'dir.}$
Sediment(20 oC)	< %0,05
Recommended usage concentration	%1-3-6
Suitable for use with fresh or seawater.	
Burn-Back Resistance Level	С
Fire Fight Performance Class	Ш
Freze Point	-15°C

#### **Application**

A FOAM-1-3-6AR concentrates produce foams that are effective in suppressing both types of Class B fuel fires – polar solvent (water soluble) fuels such as methanol, ethanol and acetone, as well as hydrocarbon fuels, such as gasoline, diesel and petroleum.

A FOAM-1-3-6AR is principally recommended for protection against fire in '

Fuel or chemical storage tanks

Industrial chemical and petroleum processing facilities

Truck/rail loading and unloading facilities

Flammable liquid containment areas

Docks and on-board marine systems

Mobile equipment



#### Approvals, Listings, and Standards

A FOAM-1-3-6AR is in conformity with all national and international standarts, EN 1568:2018 Part 1,Part2, Part 3, Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2015.

#### **FoamingProperties**

A FOAM-1-3-6AR Concentrate may be effectively applied using most conventional foam discharge equipment at 1-3-6% dilution with fresh, salt, or hard water. For optimum performance, water hardness should not exceed 500 ppm expressed as calcium and magnesium.

A FOAM-1-3-6AR Concentrate requires low energy to foam and the foam solution may be applied with aspirating and non-aspirating discharge devices.

Aspirating discharge devices typically produce expansion ratios from 3.5:1 to 10:1 depending on the type of device and the flow rate. Non-aspirating devices, such as handline water fog/stream nozzles or standard sprinkler heads, typically produce expansion ratios from 2:1 to 4:1. Medium-expansion discharge devices typically produce expansion ratios from 20:1 to 60:1.

#### **Performance**

A FOAM-1-3-6AR is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. PerformanceLaboratories.

#### Compatibility

A FOAM-1-3-6AR is suitable for use in combination with:

- Soft or hard, fresh or seawater.
- Dry powder extinguishing agents either seperately or as twin agentsystems. -Expanded AFFF-AR foams for application to a fire in sequence or simultaneously.

A FOAM-1-3-6AR properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

#### **Storage**

A FOAM-1-3-6AR is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container. A FOAM-1-3-6AR is suitable for storing steel tankbody.

#### **TypicalPackingSpecification**

Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight(kg)	1.0	1.2	9.0	70
Filled Weight(kg)	21	32	230	1075
Dimensions(mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H







### **CAFS FOAM %1-3-6**



#### **Description**

cafs Foam % 1-3-6 Foam is specially formulated to make water more effective for fire fighting. The fluorosurfactants in CAFS FOAM % 1-3-6 foam significantly reduce water's surface tension and, when mixed with air, create a superior foam blanket that surrounds fuels with a thick layer of water. This creates a barrier between the fuel and the fire, knocking down the fire faster than water alone, and allowing fire fighters to see the areas of application. Making the water more effective reduces the amount of water needed to extinguish the fire, reduces water damage and increases fire fighter safety through quicker knockdown and reduced mop-up/overhaul requirements.

#### **Typical Physiochemical Properties**

Appearance	Pale yellow liquid
pH(20 oC)	7.5 ± 1
Viscosity(20 oC)	Min 10 cP
Density(20 oC)	$1.05 \pm 0.03  \text{gr/cm3}$
Storage Temperature	Min-15° $C$ ,Max+60 ° $C$
Sediment(20 oC)	< %0,05
Recommended usage concentration	%1-3-6
Suitable for use with fresh or seawater.	
Burn-Back Resistance Level	В
Fire Fight Performance Class	Ш
Pour Point	-13°C
Frezee Point	-15° <b>C</b>

#### **Application**

CAFS FOAM % 1-3-6 is highly effective for fighting Class A/B fires when mixed with water at use rates of % 1-3-6. It has proven effectiveness in many applications including Compressed Air Foam Systems (CAFS), structural firefighting, forest fire suppression and prescribed burning, mine fires, industrial Class A/B fires, and for extinguishing hydrocarbon spill fire



#### Approvals, Listings, and Standards

CAFS FOAM % 1-3-6 is in conformity with all national and international standarts, EN 1568:2018 Part 1,Part2, Part 3 Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2015.

#### **Foaming Properties**

CAFS FOAM % 1-3-6 Concentrate may be effectively applied using most conventional foam discharge equipment at %1-3-6. dilution with fresh, salt, or hard water. For optimum performance, water hardness should not exceed 500 ppm expressed as calcium and magnesium.

CAFS FOAM % 1-3-6 Concentrate requires low energy to foam and the foam solution may be applied with aspirating and non-aspirating dischargedevices.

Non-aspirating devices, such as handline water fog/stream nozzles or standard sprinkler heads, typically produce expansion ratios from 200:1 to 500:1.

#### **Performance**

CAFS FOAM %1-3-6 is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. Performance Laboratories

#### Compatibility

CAFS FOAM % 1-3-6 is suitable for use in combination with:

- Soft or hard, fresh or seawater.
- Dry powder extinguishing agents either seperately or as twin agent systems.
- -Expanded CAFS foams for application to a fire in sequence or simultaneously.

CAFS FOAM % 1-3-6 properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

#### **Storage**

CAFS FOAM % 1-3-6 is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container CAFS FOAM % 1-3-6 is suitable for storing steel tank body.

#### **Typical Packing Specification**

Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight (kg)	1.0	1.2	9.0	70
Filled Weight (kg)	21	32	230	1075
Dimensions (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H







#### **BIO-FOAM**



#### **Description**

BIO-FOAM is a special product that stops the fire quickly and blocs it for re-firing. Can be used at petroleum facilities, industrial and herbal oil fire sand all petroleum products like plastic. This product is harmless for the living, nature and atmosphere.

It is effective in fires, paper and wood.

#### **Typical Physiochemical Properties**

Appearance 20°C	Clear
pH(20°C)	$7.1 \pm 0.3$
Viscosity(20°C)	100 ± 2cP
Density(20°C)	$1.05 \pm 0.05 \mathrm{gr/cm3}$
Storage Temperature	Min-15° $C$ ,Max+ $60$ ° $C$
Surface Tension	≤40± 2 mN/m.
Sediment(20°C)	< %0,05
Storage Time (Year)	10
Recommended usage concentration	33%

#### **Application**

BIO-FOAM -is highly effective for fighting Class A & B fires without mixing water. This product is harmless fort helving, nature and atmosphere. BIO-FOAM has TURK-AK and ISO certificates. BIO-FOAM is a product with heavy viscosity and adhesive property which is used to extinguishing and blocking re-firing at shipyards, chemical factories, machine factories and petroleum companies.

#### Approvals, Listings, and Standards

BIO-FOAM is in conformity with all national and international standarts, TURK-AK and ISO certificates directives Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2008.

#### **Storage**

BIO-FOAM is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container.



#### **Performance**

BIO-FOAM is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. PerformanceLaboratories.

#### Compatibility

BIO-FOAM is suitable for use in combination with:

- Soft or hard, fresh or seawater.

BIO-FOAM properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

Although it does not have the ability to dry vegetation, it does not contain toxic substances.

It can be easily cleaned from the surface with water.

Biodegradable, no harm to the environment and human skin.

All kinds of dry chemical powder and all kinds of expanded foam at the same time or can be used repeatedly.

Foam concentrate can be mixed with all kinds of water

#### **Typical Packing Specification**

	Plastic Dru	ım	Plastic Barrel	IBC Bulk
Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight (kg)	1.0	1.2	9.0	70
Filled Weight (kg)	21	32	230	1075
Dimensions (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H







#### PRO-JEL



#### **Description**

PRO- JEL provides high efficiency with low supply. The cooling performance of the product is excellent and stops re-firing. This product is harmless fort helving, nature and atmosphere. Pro-Gel has TURK-AK and ISO certificates. Pro-Gel is a product with heavy viscosity and adhesive property which is used to extinguishing and blocking re-firing at shipyards, chemical factories, machine factories and petroleum companies. Used without mixing with water. Pro –Jel it can be used for all Class A and B fires.

#### **Typical Physiochemical Properties**

Appearance 20°C Clear pH(20°C)  $7.2 \pm 0.3$ Viscosity(20°C) Min 900 cP  $1.01 \pm 0.01 \, \text{gr/cm}$ 3 Density(20°C) Min-5° C, Max+50° CStorage Temperature  $39 \pm 2 \, \text{mN/m}$ . Surface Tension < %0,05 Sediment(20°C) 10 Storage Time (Year)

#### **Application**

PRO – JEL -is highly effective for fighting Class A & B fires without mixing water. This product is harmless fort helving, nature and atmosphere. Pro-Gel has TURK-AK and ISO certificates. Pro-Gel is a product with heavy viscosity and adhesive property which is used to extinguishing and blocking re-firing at shipyards, chemical factories, machine factories and petroleum companies.

#### Approvals, Listings, and Standards

PRO JEL is in conformity with all national and international standarts, TURK-AK and ISO certificates directives Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2008.

#### **Storage**

PRO- JEL is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container.



#### **Performance**

PRO JEL is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. PerformanceLaboratories.

#### Compatibility

PRO JEL is NOT suitable for use in combination with:

- Soft or hard, fresh or seawater.

PRO JEL properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

Although it does not have the ability to dry vegetation, it does not contain toxic substances.

It can be easily cleaned from the surface with water.

Biodegradable, no harm to the environment and human skin.

All kinds of dry chemical powder and all kinds of expanded foam at the same time or can be used repeatedly.

#### **Typical Packing Specification**

	Plastic Drum		Plastic Barrel	IBC Bulk
Capacity	20 litres	30 litres	220 litres	1000 litres
Empty Weight (kg)	1.0	1.2	9.0	70
Filled Weight (kg)	21	32	230	1075
Dimensions (mm)	305 x 295 x 333	380 × 300 × 360	585 D x 945 H	1200 L x 1000 W x 1165 H







#### **HFC MIX**

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#### **EXPLANATION**

HFC MIX consists of an effective formulation of volatile raw materials that can extinguish fire quickly. HFC MIX is effective in electrical fires, and when it is sprayed on the flame, it suffocates the oxygen in the environment and quickly extinguishes it. HFC MIX is non-corrosive, electrically non-conductive, clear-colorless and has low toxicity.

#### **TECHNICAL SPECIFICATIONS**

Appearance	Clear
pH (20 oC)	7-9
Viskosity (20 oC)	Min 2± 2 cP
Density (20 oC)	$1.6 \pm 0.3  \text{gr/cm3}$
Storage temperature	Min-15 $^{\circ}$ $^{\circ}$ $^{\circ}$ ,Max+60 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$
Sediment (20 oC)	-
Application Amount	direct
Freeze Point	-15°C

#### **APPLICATION**

It is suitable for use in HFC MIX tubes directly or in closed circuit systems. Since HFC MIX does not contain bromine and chlorine, it is an environmentally friendly product that does not harm the ozone layer.

Since fire extinguishing systems such as water, foam and chemical powder require cleaning and damage the extinguished equipment and equipment, HFC MIX is preferred as an alternative and more effective product.

#### Usage areas;

- Computer rooms & raised floors
- Museums, art galleries, libraries, buildings
- Process control rooms,
- Telecommunications facilities
- Money Cases,
- Archives,
- Laboratories etc.

#### **COMPATIBILITY**

HFC MIX is compatible with;

- Use with dry powder extinguishers
- Use with different types of fire extinguisher foams

If the HFC MIX is thawed after freezing, there will be no change in its performance.



#### **PERFORMANCE**

HFC MIX has a very effective extinguishing performance for electrical fires and its volatile feature is very successful. At the same time, it is effective in cooling the fire due to its special structure.

#### **SAFETY AND HANDLING**

You can request a 'Material Information Form' (MSDS) from AFMER KIMYA.

#### STORAGE

HFC MIX has an extremely stable structure. Since it has volatile properties, it is necessary to keep it closed.

- Storage in its original packaging without opening
- Preventing prolonged exposure to high temperatures shelf life is 10 years





#### **PACKAGING FEATURES**

CAPACITY	40 KG	300 KG	330 KG	1400 KG
Empty WEIGHT (kg)	1.2	18	18	70
FULL WEIGHT (kg)	41.2	318	248	1470
SIZE (mm)	305 x 295 x 333	1200x600	1200x600	1200 L x 1000 W x 1165 H

Barrels and drums can be palletized according to customer demand







# A PLUS RETERDANT CONCENTRATE



#### DESCRIPTION

In forest and land fires, in addition to the extinguishers required for firefighting, Reterdants are used to prevent the spread of fire.

Serious precautions can be taken by squeezing the Retardants into areas with fire hazard and potential. A PLUS RETERDANT produced for this purpose provides a very long-term protection thanks to the inorganic salt compounds and corrosive inhibitors in its structure.

The water in its content acts as a carrier component that enables A PLUS RETERDANT to reach large areas. At the same time, thanks to the polymer chains in its content, it quickly falls to the ground when sprayed from the air. and thanks to these elastic chains, it adheres to the plant surfaces and prevents evaporation, taking the protection to the highest level.

#### **TECHNICIAL SPECIFICATIONS**

Appearance	Clear
pH (20 oC)	$7.4 \pm 0.5$
Viscosity (20 oC)	≥200 cP
Density (20 oC)	$1.4 \pm 2  gr/cm3$
Storage Temperature	Min-10 $^{\circ}$ $^{\circ}$ C ,Max+60 $^{\circ}$ $^{\circ}$
Sediment (20oC)	< %0,05
Recommended usage concentration	.%15
Can be used with sea and tap water	
Freezing Point	-10

#### **APPLICATION**

A PLUS RETERDANT is applied with fixed or rotor blade aircraft. A PLUS RETERDANT is also applied from the ground in order to take precautions for fires foreseen in active fire environments. A PLUS RETERDANT are liquid concentrates that can be easily mixed with water through proportioning systems and are easy to use.

A PLUS RETERDANT low and medium viscosity available. Medium viscosity is ideal for higher altitude drops or where higher coverage levels are desired. A PLUS RETERDANT fire retardants fire in forest, bush or grassland areas used for control. The product, which is blue in color, provides significant convenience for both pilots and firefighters to easily distinguish the area applied.

#### **COMPATIBILITY**

A PLUS RETERDANT - It is suitable to use with sea water at the specified application rates.

If A PLUS RETERDANT foam concentrate is thawed after freezing, its performance will not change.



#### **TOXIDITY**

A PLUS RETERDANT does not harm the growth of trees, plants and herbs, and supports the development of plants and soil fertility thanks to its beneficial components. Therefore, A PLUS RETERDANT is an environmentally friendly ecological product.

#### **PERFORMANCE**

Preventive effect of fire retardants in high risk areas, could potentially stop most wildfires. To prevent these high-risk locales from igniting throughout the season, A PLUS RETERDANT has been developed with better adhesion and effectiveness on vegetation.

Thanks to this feature, it delays the ignition and reduces the combustion rate to a large extent.

#### SAFETY AND HANDLING

You can request a 'Material Information Form' (MSDS) from AFMER KIMYA.

#### **STORAGE**

A PLUS RETERDANT concentrate has an extremely stable structure.

Keeping it in its original packaging without opening Avoid prolonged exposure to high temperatures shelf life is 10 years.

#### **PACKAGING FEATURES**

Capacity	20 KG	30 KG	220 KG	1000 KG
Empty Weight (kg)	1.0	1.2	9.0	70
FULLWEIGHT (kg)	21	32	230	1075
DIMENTIONS (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H

Barrels and drums can be palletized according to customer demand







### LIQUID POTASSIUM for KITCHEN FIRE



#### **Description**

Generally used at restaurants for Paddle box fire systems. It is very effective for oil fryers, grill sand fat burns at cookers. It is an ecological product that harmless to human heal than environment. It provides excellent cooling and stops re-fire again. Easily cleanable after fire.

#### **Typical Physiochemical Properties**

Appearance 20°C	clear-looking and yellow		
pH(20°C)	9± 0.3		
Viscosity(20°C)	5 ± 0.1 cP		
Density(20°C)	1.00± 0.05 gr/cm3		
Storage Temperature	Min-10° $C$ ,Max+50 ° $C$		
Surface Tension	≤ 48 mN/m		
Sediment(20°C)	< %0,05		
Storage Time (Year)	10		

#### **Application**

LIQUID POTASSIUM is also vital for the personnel, as the place where the fire is most likely to be started is the kitchens that are the center of the work done by the fire. As long as the kitchen and oven are used, the things that are created by the fumes going upwards start to present danger. It is very easy to ignite the remains in the constantly warming pit. This is where the LIQUID POTASSIUMenters and extinguishes without starting to extinguish. In such fires, the flames rising upward or igniting the roof directly cause the kitchen staff to be unaware and the danger suddenly grows. LIQUID POTASSIUM is not concentrated, it is used directly. and it is suitable for use in the kitchen thanks to the organic ingredients in its structure.

#### Approvals, Listings, and Standards

LIQUID POTASSIUM is in conformity with all national and international standarts, TURK-AK and ISO certificates directives Afmer Chemicals CO. operates a quality management system which complies with requirements of ISO 9001:2015.

#### **Storage**

LIQUID POTASSIUM is exceptionally stable in long-term storage. Shelf life of at 10 years can be expected if it is stored properly in original container.



#### **Performance**

LIQUID POTASSIUM is produced to rigorous quality control standarts. AGer each production, the performance tests are performed to product in Afmer Chemicals CO. PerformanceLaboratories.

#### Compatibility

LIQUID POTASSIUM properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

Although it does not have the ability to dry vegetation, it does not contain toxic substances.

It can be easily cleaned from the surface with water.

Biodegradable, no harm to the environment and human skin.

All kinds of dry chemical powder and all kinds of expanded from at

All kinds of dry chemical powder and all kinds of expanded foam at the same time or can be used repeatedly.

#### **Typical Packing Specification**

Plastic Drum Plastic Barrel IBC Bulk

Capacity	20 litres	30 litres	220 litres	1000 litres	
Empty Weight (kg)	1.0	1.2	9.0	70	
Filled Weight (kg)	21	32	230	1075	
Dimensions (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H	









# SB LITHIUM + PLUS 1500



#### **DESCRIPTION**

SB LITHIUM + PLUS 1500 , hydrocarbon surfactants, It consists of an effective formulation containing solvents and stabilizers. Effective in lithium-ion batteries and accumulators. It also effectively prevents re-burning. SB LITHIUM + PLUS 1500 is used for strong extinguishing as well as fire prevention.

#### **TECHNICIAL SPECIFICATIONS**

Appearance	RED
pH (20 oC)	7.1 ± 0.5
Viscosity (20 oC)	≥ 200 m.Pas
Density (20 oC)	1.10 - 1.20 gr/cm3
Storage temperature	Min-5° $C$ ,Max+60 ° $C$
Recipitate (20 oC)	< %0,05
Recommended Use	Direct
Freezing Point	-4°C ± 2

Typ 18650 700Wh - 900Wh - 1500Wh

#### **APPLICATION**

SB LITHIUM + PLUS 1500 When used with low expansion foam lances, it successfully performs the extinguishing process with the stable gel cover formed. To be used in fires such as lithium batteries and car batteries, a successful extinguishing process can be performed at 6 bar pressure and with direct precision application/ forced application methods.



#### COMPATIBILITY

SB LITHIUM + PLUS 1500 compatible with the following;

- -Use with dry powder extinguishers
- -Using with different types of fire extinguisher foams

SB LITHIUM + PLUS 1500 If it is thawed after freezing, there will be no change in its performance.





#### **STANDARDS**

AFMER KIMYA national and international standards; EN 1568: 2018 TSE EN 1568:2018 ISO 9001:2015 CE DECLARATION OF CONFORMITY

#### **PERFORMANCE**

SB LITHIUM + PLUS 1500 has a very effective extinguishing performance for indoor and outdoor lithium-ion batteries and battery fires, and its adhesion to vertical surfaces is very successful. At the same time, it has a high fire cooling feature thanks to the chemicals it contains. Compared to other lithium battery extinguishers, SB LITHIUM + PLUS 1500 provides faster extinguishing, but has a very high fire-back resistance level and a stable performance.

#### **SAFETY AND HANDLING**

You can request a 'Material Safety Data Sheet' (MSDS) from AFMER KİMYA A.Ş.

#### **STORAGE**

SB LITHIUM + PLUS 1500 has an extremely stable structure.

It should be kept in its original package without opening.

If long-term exposure to high temperatures is prevented, its shelf life is 4 years.

#### **PACKAGING FEATURES**

Drums or Barrels can be palletized according to customer demand.

CAPACITY	20 KG	30 KG	220 KG	1000 KG
EMPTY WEIGHT (kg)	1.0	1.2	9.0	70
FULL WEIGHT (kg)	21	32	230	1075
SIZES (mm)	305 x 295 x 333	380 x 300 x 360	585 D x 945 H	1200 L x 1000 W x 1165 H





