Mar 2

Class A firefighting liquid agent and eco-retardant



wins over fire

Description

Mar 2 is water additive firefighting agent and ecoretardant, specially designed for wildland and other class A fires.

When added to water in proper quantities, Mar 2 water additive suppresses cools, mitigates fire and vapours, and provides insulating properties for fuels exposed to radiant heat or direct flame impingement. Mar 2 water additive reduce water's surface tension and increase its penetrating and spreading abilities, provide enhanced cooling, emulsification, and foaming characteristics. This creates faster penetration and better fire control when attacking combustible class A fires.

Application

Mar 2, water additive firefighting agent and eco-retardant, is specially designed to apply on wildland and other class A fires including wood, paper, coal, rubber and structure fires.

Mar 2 can be mixed with other fire fighting agents or foam concentrates.

Application rates

Recommended application rates on wildland fires:

• Mop-up: 6% • Fire Break: 6%

• Initial Suppression: 6%

• Protection: 6%.

Recommended application rate on structure fires is 6%. Minimum admixture rate on other class A fires is 6%.

Agent proportioning

Mar 2, water additive firefighting agent and eco-retardant can be proportioned using most proportioning equipment:

- Balanced pressure pump systems
- Bladder tank systems
- Eductors (with metering orifice).

Fire performance

Mar 2 cools 21 times faster than water, and works to remove heat and the fuel sources from the fire tetrahedron. Mar 2 is also an emulsifier, which preventing re-ignition by forming emulsion. An emulsifier is mixture of chemicals that along with some energy input, promotes the forming of an emulsion.

Mar 2 agent causes a significant reduction in the concentration of carbon monoxide, carbon dioxide and hydrogen chloride. Under certain conditions the agent and water promotes the condensation into droplets which develops into "cooled white steam".

Typical physical properties

Appearance: Clear light red liquid

Freezing point: - 15 °C, without quality loss

Maximum storage temp: +65 °C

8,2 (concentrate) pH:

Specific gravity: 1.2 at 20 °C

Sediments: None





Storage

The temperature range for Mar 2 firefighting agent is from $-15\,^{\circ}\text{C}$ to $+65\,^{\circ}\text{C}$. When stored in original containers or in manufacturer recommended equipment, and within the specified temperature range, the shelf life is 5 years or more.

Inspection

Mar 2 water additive firefighting agent doesn't need any inspection or other control during the 5 years lifespan.

Compatibility

Mar 2 water additive firefighting agent is compatible with all conventional fire fighting equipment such as non-air aspiration and air aspiration foam nozzles, rotary and fixed wing aircraft, low, medium and high expansion



devices, balanced pressure pump system, bladder tank systems and eductors.

Environmental information

- Environmental Friendly
- Rapid biodegradable
- Non-Toxic
- · Not toxic by inhalation
- · Contains no REACH candidate substance
- No harmful for ozone: zero ozone depletion potential (ODP)
- Zero global warming potential (GWP)
- pH: 8,2 (concentrate)



It is important to note that all trees and plants will grow well, under near optimal conditions with a pH 6,8 – pH 8,2 in ground. Today, we rarely find these conditions in environment.

The majority of wildland trees falls in the group of conditions with a pH 8,2 as ideal growth condition!

Certification

Mar 2 water additive firefighting agent is certified by Intertek as a environmental friendly, and have Green leaf environmental certificate.

Ordering information

Mar 2 water additive firefighting agent is available in following packaging's:

Article no.	Product - description	Quantity	Approximate dimension (L x W x H)	Approximate cube	Approximate shipping weight
M200	Mar 2 – water additive firefighting agent 20 liter/5 gallon pail	1	29,5 x 26 x 34 cm	0.026 m³ (1.25 ft³)	21 kg (45 lb)
M280	Mar 2 – water additive firefighting agent 20 liter / 5 gallon pail on euro pallet	24	120 x 80 x 82,5 cm	0,792 m³ (27.70 ft³)	528 kg (1165 lb)
M290	Mar 2 – water additive firefighting agent tote 1000 liter / 265 gallon	1	120 x 100 x 120 cm	1.44 m³ (50.05 ft³)	1118 kg (2465 lb)





Certificate of Warranty





FLRMAR<

Flamark d.o.o./Flamark Ltd., Ante Topića Mimare 40, 10090 Zagreb, Croatia (HR)
Phone: +385 (0)1 77 91 700 • Mobile: +385 (0)98 994 2000
www.flamark.hr • E-mail: info@flamark.hr