

FOMTEC® Enviro 3x3 NEO

Fluorine free alcohol resistant foam concentrate



Fomtec® Enviro 3x3 NEO enviro neo by fomtec

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Fomtec® Enviro 3x3 NEO is a sixth generation AR SFFF multi-purpose alcohol resistant firefighting foam concentrate with no intentionally added fluorinated surfactants and polymers (PFAS). The unique formulation of Fomtec® Enviro 3x3 NEO enables the foam to rapidly cover burning surfaces and control the fire. Fomtec® Enviro 3x3 NEO is effective against both hydrocarbon and polar solvent fuel fires at 3% concentration

- Fluorine free alcohol resistant foam concentrate
- Excellent fire performance on Heptane, Jet A 1, Hexane, Acetone, Ethanol, Methanol, IPA, MEK and Ethyl- and Butyl Acetate with fresh and saltwater
- DOESN'T contain any partially- or un-hydrated polymers



DESCRIPTION

The fire suppression mechanism of Fomtec Enviro 3x3 NEO is utilising the foam blankets ability to block oxygen supply to the fuel and the high water content cools the fuel surface reducing the evaporation of flammable vapours. Additionally, the foam blanket prevents reignition of an extinguished fuel surface. When applied on polar solvents a polymeric membrane is formed and makes it possible for the foam blanket to extinguish effectively. It also works on severe foam destroying liquids such as MTBE.

Fomtec Enviro 3x3 NEO does NOT contain any partially or unhydrated polymers and is not subject to viscosity increase due to water ingress. Fomtec Enviro 3x3 NEO should be used at a 3% proportioning ratio (3 parts concentrate and 97 parts water) for hydrocarbon fuels as well as polar solvents. For use on Class A type fires, induction ratio of 0,3% to 1% is recommended depending on application and discharge device.

APPLICATION

Fomtec Enviro 3x3 NEO is intended for use on class B hydrocarbon fuels as well as polar solvents like isopropyl alcohol, methanol, ethanol, acetone, etc. Fomtec Enviro 3x3 NEO is designed for the high risk petrochemical, oil and gas, marine and offshore industry as well as other high risk industries where flammable and combustible liquids represent a significant fire hazard. Fomtec Enviro 3x3 NEO can be used as low and medium expansion foam. Especially suited for use in mobile firefighting by use of foam discharge devices such as foam branchpipes and monitors, where application rates and technique can be adjusted to the specifics of each incident. Or in systems designed for use with the product based on recommended minimum applications rates, application duration and discharge devices.

Fomtec Enviro 3x3 NEO is also effective against class A fires such as wood, paper, textiles etc. at 0,3% to 1% proportioning.

APPROVALS AND LISTINGS

FIRE PERFORMANCE & FOAMING

The fire performance of this product has been tested and documented according to the "International Approvals" stated in this document. Beyond the standards it has been tested on a range of fuels to verify performance. The use of the product should follow design guidelines appropriate to the type of system and application. The foaming properties are depending on equipment used and other variables such as water and ambient temperatures. Average expansion 7:1, average 25% drainage time 15:00 minutes using UNI 86 test nozzle according to EN 1568-3.

EQUIPMENT

Fomtec Enviro 3x3 NEO can be proportioned at the correct ratio using proportioning equipment designed for the foam type.

Fomtec Enviro 3x3 NEO is suitable for use with Type II (gentle application) and Type III (forceful application) discharge devices. It can be used in low and medium expansion applications with all conventional aspirating discharge devices giving an expansion ratio of more than 7:1 for best performance. Fomtec Enviro 3x3 NEO is also suitable for use in CAF-systems.

TYPICAL DATA

Appearance	Clear yellowish liquid
Specific gravity at 20°C	1,06 +/- 0.02 g/ml
Viscosity	Pseudoplastic
pH	6,5 – 8,5
Freezing point	-14,6°C
Recommended storage temperature	-14 - 55°C
Surface tension	≤ 30,0 mN/m

	Part 1-2	Part 3	Part 4	Part 4
EN1568:2018	Pass	1A/1A Heptane, 1A Jet A1 1/2A Hexane Additionally, tested to the gentle application method with a 3B rating on all fuels	1A/1A IPA, Acetone Ethanol, Methanol, Ethyl-/Butyl Acetate	Additional testing on MEK 19.8 lpm/m ² freshwater 6.6 lpm/m ² seawater (1B)

	Type III	Type II	Foam Water Sprinkler	Sprinkler
UL 162	Heptane	Heptane, IPA, Acetone, Ethanol, Methanol, Ethyl-/Butyl Acetate, MEK, Acetic Acid	Heptane, Ethanol	Heptane

	Hydrocarbon	Polar solvent
IMO 1312	Heptane	IPA

ICAO	Level B
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	Heptane Freshwater	Heptane Seawater	Ethanol Freshwater	Ethanol Seawater
LASTFIRE	Good/Good/Good	Good/Good/Acceptable	Good/Acceptable	Acceptable/Acceptable

STORAGE / SHELF LIFE

Stored in original unbroken packaging the product will have a long shelf life. Shelf life in excess of 10 years will be found in temperate climates. As with all foam concentrates, shelf life will be dependent on storage temperatures and conditions. For storage recommendations and material compatibility please refer to our Fomtec Technical Advices FTA 10 addressing the topic.

INSPECTION / TESTING / MAINTENANCE

All foam concentrates should be tested annually. Testing should be carried out by an approved laboratory certified to assess firefighting foam quality according to relevant standards, such as NFPA 11, EN 13565-2, EN 1568 and IMO MSC.1/Circ. 1312. Storage containers should be inspected and reevaluated for the suitability of the storage location regarding temperature fluctuations (temperature should be as stable as possible). Exposure to direct sunlight should be avoided.

COMPATIBILITY

Fomtec Enviro 3x3 NEO can be used together with foam compatible powders and other expanded foams. It is suitable for all water types. For mixing with other foam concentrates, contact Fomtec for advise and guidance. For material compatibility please refer to our Fomtec Technical Advices FTA 20 addressing the topic.

ENVIRONMENTAL

Fomtec Enviro 3x3 NEO is non-hazardous, biodegradable substance formulated using raw materials specially selected for their fire performance and their environmental profile. All raw materials are registered in European REACH-database. The product is formulated with no intentionally added fluorinated surfactants and polymers (PFAS) and other organohalogens. The disposal of spills of concentrate or premix foam solution should be made in accordance with local regulations. For more detailed information please consult our Fomtec Technical Advices FTA 40.



ENVIRO BY FOMTEC

The Fomtec Enviro range comprises an extensive range of non-PFAS based foams suitable for use Emergency Response missions and System applications. Enviro foam concentrates are available for class A, class B fire hazards and products are available for low, medium, and high expansion discharge devices.

PACKAGING

We supply this product in 25 litre or 5 US gallon cans, 200 litre or 55 US gallon drums, and 1000 litre or 265 US gallon IBC containers. Larger bulk supply is available against special request.

Volume per piece	Packaging	Part no	Approx. shipping weight*	Dimensions (mm) L x W x H
25 ltr	Can	12-3357-01	26,95 kg	295 x 260 x441
200 ltr	Drum	12-3357-02	221,0 kg	581x 581 x 935
1000 ltr	Container	12-3357-04	1120 kg	1200 x1000 x1150
5 US gal.	Can	12-3357-00		295 x 260 x 441
55 US gal.	Drum	12-3357-03		581 x 581 x 935
265 US gal.	Container	12-3357-05		1200 x1000 x1150
Bulk	Special request			

* including packaging.

Shear Rate	Viscosity (mPas) at different temperatures			
	-10°C	0°C	10°C	20°C
75	796.6	797.9	794.0	801.8
150	466.3	426.4	414.7	415.4
225	357.5	311.3	291.3	286.9
300	298.9	251.8	229.6	222.0
375	262.4	217.4	193.1	180.8
450	226.7	193.2	168.8	155.7
525	195.1	175.3	151.2	137.6
600	166.6	162.2	138.9	124.4

Viscosity (Brookfield Cone-Plate rheometer) measured by KIWA MPA Dresden

