



Dräger - your marine safety specialist

Bio ex - Foam making liquid Catalogue Dräger Nederland B.V. Marine & Offshore

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Bio-Ex Filmopol 1x3 LT15

FILMOPOL 1X3LT15 is a fluorosynthetic foam AFFF-AR 1X3. The film-forming property AFFF gives to FILMOPOL 1X3LT15 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air. The Alcohol-Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance.

Applications

FILMOPOL 1X3LT15 can be used with tap water, sea water and brackish water at 1% on hydrocarbon and at 3% on polar solvents fires as well as on special chemicals : acids, HF, HCl, amines, Butadiene, CS2. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Pseudoplastic

FILMOPOL 1X3LT15 is pseudoplastic: its viscosity decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

Foaming power

FILMOPOL 1X3LT15 is usable at Low, Medium and High Expansion.

Fuel fires

FILMOPOL 1X3LT15 is efficient on hydrocarbon and polar solvents fires.

Environment

FILMOPOL 1X3LT15 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Filmopol 1X3LT15
Appearance	white gel
Specific gravity at 20°C	1.03 ± 0.02 kg/dm3
Ph at 20°	7.0 ± 1.0
Viscosity at 20°C (mPa.s)	2300 ± 200 mPa.s
Freezing point	-15°C
Temperature of use	+13°C / + 50°C
Surface tension at 1% (mN/m)	16 ± 2 mN/m
Interfacial tension at 1% (mN/m)	$2 \pm 1 \text{ mN/m}$
Foam Quality at 1%	
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25 %	> 10 minutes
Medium expansion	> 30, foam expansion values depend on the equipment
Foam Quality at 3%	
Low expansion	> 8, foam expansion values depend on the equipment
Drainage time 25 %	> 30 minutes
Medium expansion	> 100, foam expansion values depend on the equipment
High expansion	> 600, foam expansion values depend on the equipment

Description	Unit Sales	Articlenr
Bio-Ex Filmopol-AR: LT151x3 - 20 liter	1	25121031



Bio-Ex Fluofoam 1

FLUOFOAM 1 is a fluorosynthetic foam AFFF, based on the combination of surfactants selected for their foaming property and their resistance to dehydration and heat. The film-forming property AFFF gives to FLUOFOAM 1 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air.



Bio-Ex Fluofoam 1 Efficient on all hydrocarbon fires

Applications

FLUOFOAM 1 can be used with tap water, sea water and brackish water at 1% on hydrocarbon fires. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Foaming power

FLUOFOAM 1 is usable at Low Expansion. This fluid foam is not contaminated on hydrocarbons and enables a forceful application. FLUOFOAM 1 is usable at Medium Expansion to create a foam blanket to protect against burnback.

Fuel fires

FLUOFOAM 1 is efficient on all hydrocarbon fires, such as diesel, kerosene, petrol

Environment

FLUOFOAM 1 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Fluofoam 1
Appearance	yellow liquid
Specific gravity at 20°C	1.02 ± 0.02 kg/dm3
pH at 20°C	8.0 ± 1.0
Viscosity at 20°C	6 ± 2 cStokes
Sediments	0%
Surface tension at 6%	17 ± 2 mN/m
Interfacial tension at 6%	3 ± 1 mN/m
Freezing point	-20°C
Temperature of use	-15°C to +50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25%	> 2 minutes
Medium Expansion	> 40, foam expansion values depend on the equipment
Approvals	EN 1568-3

Description	Unit Sales	Articlenr
Bio-Ex Fluofoam: 1% - 20 liter	1	25121001

Bio-Ex Hydropol 3

HYDROPOL 3 is a fluorosynthetic foam AR 3X3. The Alcohol Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance. HYDROPOL 3 is pseudoplastic: its viscosity decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

Applications

HYDROPOL 3 can be used with tap water, sea water and brackish water at 3% on hydrocarbon and polar solvents fires as well as for the keeping of gazeous fumes : acids, HCI, NH3. in Medium Expansion. It is suitable with all kind of known equipment.

Foaming power

HYDROPOL 3 is usable at Low, Medium and High Expansion.

Fuel fires

HYDROPOL 3 is efficient on hydrocarbon and polar solvents fires. HYDROPOL 3 can keep its water for a very long period. This outstanding property makes it highly efficient on polar solvents fires.

Environment

HYDROPOL 3 is easily biodegradable.



TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Hydropol 3
Appearance	yellow gel
Specific gravity at 20°C	1.05 ± 0.02 kg/dm3
Ph at 20°	7.0 ± 1.0
Viscosity at 20°C (mPa.s)	1500 ± 200 mPa.s
Sediments	< 0.1 %
Surface tension at 3% (mN/m)	23 ± 2 mN/m
Freezing point	-15°C
Temperature of use	-10°C + 50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25 %	> 10 minutes
Medium expansion	> 50, foam expansion values depend on the equipment
High expansion	> 600, foam expansion values depend on the equipment

Description	Unit Sales	Articlenr
Bio-Ex Hydropol-AR: 3% per liter	1	25121019
Bio-Ex Hydropol-AR: 3% per 20 liter per can	1	25121028

Bio-Ex Filmopol 3

FILMOPOL 3 is a fluorosynthetic foam AFFF-AR 3X3. The film-forming property AFFF gives to FILMOPOL 3 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air. The Alcohol-Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance.



FILMOPOL 3 can be used with tap water, sea water and brackish water at 3% on hydrocarbon and polar solvents fires as well as on special chemicals : acids, HF, HCl, amines, Butadiene, CS2. It is compatible with dry

Foaming power

FILMOPOL 3 is usable at Low, Medium and High Expansion.

Fuel fires

FILMOPOL 3 is efficient on hydrocarbon and polar solvents fires.

Environment

FILMOPOL 3 is easily biodegradable.



Bio-Ex Filmopol 3

Efficient on hydrocarbon and polar solvents fires

TECHNICAL SPECIFICATIONS

FILMOPOL 3 is pseudoplastic: its viscosity

Pseudoplastic

decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

extinguishing powders and it is suitable with

all kind of known equipment.

Reference	Bio-Ex Filmopol 3
Appearance	white gel
Specific gravity at 20°C	1.00 ± 0.02 kg/dm3
Ph at 20°	7.0 ± 1.0
Viscosity at 20°C (mPa.s)	2300 ± 200 mPa.s
Sediments	<0.1%
Surface tension at 3% (mN/m)	16 ± 2 mN/m
Interfacial tension at 3% (mN/m)	2 ± 1 mN/m
Freezing point	0°C
Temperature of use	+2°C / + 50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25 %	> 10 minutes
Medium expansion	> 30, foam expansion values depend on the equipment
High expansion	> 400, foam expansion values depend on the equipment
Approvals / standards	EN 1568-3, EN 1568-4, Lastfire certificate, Bureau Veritas certifcate

Description	Unit Sales	Articlenr
Bio-Ex Filmopol-3 AR: 3% - 25 liter per can	1	25121035

Bio-Ex Filmopol 3x3

FILMOPOL 3LT15 is a fluorosynthetic foam AFFF-AR 3X3. The film-forming property AFFF gives to FILMOPOL 3LT15 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air. The Alcohol-Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance.

Applications

FILMOPOL 3LT15 can be used with tap water, sea water and brackish water at 3% on hydrocarbon and polar solvents fires as well as on special chemicals: acids, HF, HCI, amines, Butadiene, CS2. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Pseudoplastic

FILMOPOL 3LT15 is pseudoplastic: its viscosity decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

Foaming power

FILMPOPOL 3LT15 is usable at Low, Medium and High Expansion.

Fuel fires

FILMPOPOL 3LT15 is efficient on hydrocarbon and polar solvent fires.

Environment

FILMPOPOL 3LT15 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Efficient on hydrocarbon and polar solvents

Bio-Ex Filmopol 3

fires

Bio-Ex Filmopol 3 LT15
white gel
1.03 ± 0.02 kg/dm3
7.0 ± 1.0
2300 ± 200 mPa.s
<0.1%
16 ± 2 mN/m
2 ± 1 mN/m
-15°C
-13°C / + 50°C
> 7, foam expansion values depend on the equipment
> 10 minutes
> 30, foam expansion values depend on the equipment
> 400, foam expansion values depend on the equipment
EN 1568-3, EN 1568-4, Lastfire certificate, Bureau Veritas certifcate

Description	Unit Sales	Articlenr
Bio-Ex Filmopol-3 AR: 3% - 20 liter per can	1	25121033
Bio-Ex Filmopol-AR: 3% - 200 liter per can	1	25121034

Bio-Ex Fluofoam 3

FLUOFOAM 3 is a fluorosynthetic foam AFFF, based on the combination of surfactants selected for their foaming property and their resistance to dehydration and heat. The film-forming property AFFF gives to FLUOFOAM 3 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air.



Bio-Ex Fluofoam 3 Efficient on all hydrocarbon fires

Applications

FLUOFOAM 3 can be used with tap water, sea water and brackish water at 3% on hydrocarbon fires. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Foaming power

FLUOFOAM 3 is usable at Low Expansion. This fluid foam is not contaminated on hydrocarbons and enables a forceful application. FLUOFOAM 3 is usable at Medium Expansion to create a foam blanket to protect against burnback.

Fuel fires

FLUOFOAM 3 is efficient on all hydrocarbon fires, such as diesel, kerosene, petrol

Environment

FLUOFOAM 3 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Fluofoam 3
Appearance	yellow liquid
Specific gravity at 20°C	1.01 ± 0.02 kg/dm3
pH at 20°C	8.0 ± 1.0
Viscosity at 20°C	4 ± 2 cStokes
Sediments	0%
Surface tension at 3%	17 ± 2 mN/m
Interfacial tension at 3%	2 ± 1 mN/m
Freezing point	-5°C
Temperature of use	0°C to +50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25%	> 2 minutes
Medium Expansion	> 40, foam expansion values depend on the equipment
Approvals	EN 1568-3, Bureau Veritas certificate

Description	Unit Sales	Articlenr
Bio-Ex Fluofoam: 3G% / LT15 - 20 liter, Freeze protected -15°C	1	25121002
Bio-Ex Fluofoam: 3% - 20 liter	1	25121003
Bio-Ex Fluofoam: 3% - 200 liter	1	25121004

Bio-Ex Fluofoam 6

FLUOFOAM 6 is a fluorosynthetic foam AFFF, based on the combination of surfactants selected for their foaming property and their resistance to dehydration and heat. The film-forming property AFFF gives to FLUOFOAM 6 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air.



Bio-Ex Fluofoam 6

Efficient on all hydrocarbon fires

Applications

FLUOFOAM 6 can be used with tap water, sea water and brackish water at 6% on hydrocarbon fires. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Foaming power

FLUOFOAM 6 is usable at Low Expansion. This fluid foam is not contaminated on hydrocarbons and enables a forceful application. FLUOFOAM 6 is usable at Medium Expansion to create a foam blanket to protect against burnback.

Fuel fires

FLUOFOAM 6 is efficient on all hydrocarbon fires, such as diesel, kerosene, petrol.

Environment

PROPOL 6 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Fluofoam 6
Appearance	yellow liquid
Specific gravity at 20°C	1.01 ± 0.02 kg/dm3
pH at 20°C	8.0 ± 1.0
Viscosity at 20°C	4± 2 cStokes
Sediments	0%
Surface tension at 6%	17 ± 2 mN/m
Interfacial tension at 6%	3 ± 1 mN/m
Freezing point	-3°C
Temperature of use	0°C to +50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25%	> 2 minutes
Medium Expansion	> 40, foam expansion values depend on the equipment
Approvals	EN 1568-3: class IB, Bureau Veritas certificate

Description	Unit Sales	Articlenr
Bio-Ex Fluofoam: 6% - 20 liter	1	25121006
Bio-Ex Fluofoam: 6% - 200 liter	1	25121008
Bio-Ex Fluofoam: 3X - 20 liter, freeze protected -10°C	1	25121010

Bio-Ex Hydropol 6

HYDROPOL 6 is a fluorosynthetic foam AR 6X6. The Alcohol Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance. HYDROPOL 6 is pseudoplastic: its viscosity decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

Applications

HYDROPOL 6 can be used with tap water, sea water and brackish water at 6% on hydrocarbon and polar solvents fires as well as for the keeping of gazeous fumes: acids, HCl, NH3. in Medium Expansion. It is suitable with all kind of known equipment.

Foaming power

HYDROPOL 6 is usable at Low, Medium and High Expansion.

Fuel fires

HYDROPOL 6 is efficient on hydrocarbon and polar solvents fires. HYDROPOL 6 can keep its water for a very long period. This outstanding property makes it highly efficient on polar solvents fires.

Environment

HYDROPOL 6 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Reference	Bio-Ex Hydropol 6 x 6
Appearance	yellow gel
Specific gravity at 20°C	1.06 ± 0.02 kg/dm3
Ph at 20°	7.0 ± 1.0
Viscosity at 20°C (mPa.s)	1000 ± 200 mPa.s
Sediments	< 0.1 %
Surface tension at 6% (mN/m)	23 ± 2 mN/m
Freezing point	-14°C
Temperature of use	-10°C + 50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25 %	> 10 minutes
Medium expansion	> 30, foam expansion values depend on the equipment
High expansion	> 400
Approvals	EN 1568-1, EN 1568-2, EN 1568-3, EN 1568-4 Navy: Bureau Veritas certificate

Description	Unit Sales	Articlenr
Bio-Ex Hydropol-AR: 6% - 20 liter	1	25121018
Bio-Ex Hydropol-AR: 6% - 200 liter	1	25121009



Bio-Ex Filmopol 6x6

FILMOPOL 6 is a fluorosynthetic foam AFFF-AR 6X6.The film-forming property AFFF gives to FILMOPOL 6 a high speed of extinction on hydrocarbon fires thanks to the aqueous film which insulates the fuel surface from the air. The Alcohol-Resistant property produces a thick layer – skin – if applied on any kind of fuels. The peculiar nature of our fluoropolymer gives outstanding burnback resistance.

Applications

FILMOPOL 6 can be used with tap water, sea water and brackish water at 6% on hydrocarbon, on polar solvents fires as well as on special chemicals: acids, HF, HCI, amines, Butadiene, CS2. It is compatible with dry extinguishing powders and it is suitable with all kind of known equipment.

Pseudoplastic

FILMOPOL 6 is pseudoplastic: its viscosity decreases when it is agitated. This property authorizes its use even at low temperature and low pressure.

Foaming power

FILMOPOL 6 is usable at Low, Medium and High Expansion.

Fuel fires

FILMOPOL 6 is efficient on hydrocarbon and polar solvents fires.

Environment

FILMOPOL 6 is easily biodegradable.

TECHNICAL SPECIFICATIONS

Dräger

Reference	Bio-Ex Filmopol 6x6
Appearance	white gel
Specific gravity at 20°C	1.00 ± 0.02 kg/dm3
Ph at 20°	7.0 ± 1.0
Viscosity at 20°C (mPa.s)	1000 ± 200 mPa.s
Sediments	<0.1%
Surface tension at 6% (mN/m)	16 ± 2 mN/m
Interfacial tension at 6% (mN/m)	2 ± 1 mN/m
Freezing point	0°C
Temperature of use	+2°C / + 50°C
Low expansion	> 7, foam expansion values depend on the equipment
Drainage time 25 %	> 10 minutes
Medium expansion	> 30, foam expansion values depend on the equipment
High expansion	> 400, foam expansion values depend on the equipment

Description	Unit Sales	Articlenr
Bio-Ex Filmopol-AR: 6x6 - 20 liter	1	25121039
Bio-Ex Filmopol-AR: 6x6 - 200 liter	1	25121038

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