

GLORIA[®]

Safety First



ON THE WAY TO A FLUORINE-FREE FUTURE
The GLORIA concept for sustainable fire fighting



The expectations and requirements for fire protection products are naturally high. They should function immediately in an emergency, be intuitive to use and powerful even for laypersons, save lives, preserve health, protect values and be durable. Ideally, the extinguishing agent used should be gentle on the environment and leave hardly any consequential damage after use. In recent years, modern GLORIA wet fire extinguishers, i.e. foam or water extinguishers, met this ecological standard. While GLORIA high-performance water extinguishers have always been fluorine-free, the fluorine content of foam extinguishers of the SE+, SH and SDE types was already reduced to 0.04% in 2014.

The latter foam fire extinguishers are now being tackled: the legislator plans to completely do away with fluorosurfactants, which are difficult to degrade in nature, in the next few years - a corresponding European ECHA regulation is about to be published. This is a huge challenge for extinguishing agent producers, because film-forming extinguishing agents have long been considered the top class for use on larger, flammable class B liquids.

In our brochure we would like to provide you with detailed information on the status quo and the fluorine-free future of GLORIA wet extinguishers. **Of course, further products will be added to the brochure on an ongoing basis.**

What does the fluorine content in conventional foam extinguishing agents do?

The fluorine substances give the extinguishing foam its excellent film-forming properties, which significantly enhance the extinguishing effect, especially on B fires (liquid fires). A very thin liquid film is formed between the liquid and the foam. On the A-fire, the fluorosurfactants can lower the surface tension much further than other additives in the foam concentrate. This ensures that the foam penetrates better and faster into fine structures. In addition, the fluorosurfactants ensure that the foam concentrate has a repellent effect on liquids. The advantage: the liquid film is more stable, lasts longer and does not crack. These characteristics mean that gas escape from the flammable liquid is effectively prevented. The fluorine compounds belong to the group of PFAS.

What are PFAS?

PFAS are often toxic per- and polyfluorinated alkyl substances, of which more than 4,700 individual substances are known. Chemically, PFAS are organic compounds of various chain lengths in which the hydrogen atoms have been completely (perfluorinated) or partially (polyfluorinated) replaced by fluorine atoms. They are found in many everyday products, such as outdoor jackets, Teflon pans and pots, cosmetics and protective clothing, but also in fluorine-containing fire extinguishing agents.

Why are foam extinguishing agents criticized?

The chemically produced substances do not occur in nature. Although they offer the advantage of being water, dirt and grease repellent, they have long been suspected of being harmful to living organisms. They rapidly enter our ecosystem via water and accumulate in humans via groundwater and drinking water, food (plants, animals and bioorganisms) or the air we breathe.

What does the future look like?



What can we expect in the future for extinguishing agents containing fluorine?

The future will clearly be fluorine-free. The period of use of devices containing fluorosurfactants will most likely be restricted.

The exact wording of the new ECHA regulation, especially the regulation of the further periods of use, remains to be seen.

Does a purchase of new fluorine-containing fire extinguishers/ extinguishing agents still make sense?

Rather NO - economically and from an environmental point of view, a purchase should be questioned - especially with regard to sustainability/longevity. Due to the emerging obligation to phase out fluorine-containing foams, in a worst-case scenario as early as 2024/2025, their acquisition should be carefully considered.

Because: The service life of conventional foam extinguishers will become very manageable due to the new regulation. Comprehensive advice to end users in favor of fluorine-free extinguishing agents is the order of the day.

Are there any transition periods for existing equipment?

This has not yet been decided and the final communication remains to be seen. GLORIA is working on concepts that provide for the continued use of various existing devices through exchange.

A new purchase is pending - what does GLORIA recommend?

1. Do fluorine-free foam extinguishers necessarily have to be used if previously a conventional foam extinguisher was installed?

Fire risk and fire load must be carefully calculated for an initial fire in the fire protection concept for areas to be protected. In future, the economically ideal result for the operating company may be a mix of fluorine-free foam and modern high-performance water extinguishers.

2. Fire risk and fire load in workplaces according to ASR 2.2 - differentiated advice is the key!

As one of many examples, consider the classic workplace in an administrative building with file storage. A differentiated risk assessment will predominantly identify a fire of solid materials in the formation phase as the highest risk. For fire class A, a water extinguisher would be suitable for this area.

In the manufacturing sector, e.g. flammable liquids are used in the same company. At this point, the fluorine-free foam extinguisher would be predestined.

For both types, the same trigger controls should be selected to be user-friendly.

Since 2019, the European Chemicals Agency (ECHA) has been working on a general ban of fluorosurfactants in firefighting foams. The draft was published in spring 2022 and is currently being discussed in EU regulatory committees. If the restriction of these substances is enforced as proposed, current extinguishing agents based on C6 technology will no longer be allowed to be manufactured, used or placed on the market in the EU.

In our timeline, we would like to give you a condensed overview of the next steps.

PFAS regulation of foam extinguishing agents for portable and mobile fire extinguishers



Pre-study

ECHA preliminary study on the restriction of the use of per- and poly-fluoroalkyl substances (PFAS) in firefighting foams.

This includes the chemical compound PFHxA, which is the basis of modern C6-based firefighting foams.

Consultation procedure

March 2022: Launch of ECHA's consultation process on the regulation of PFASs in firefighting foams.

September 2022: End of the consultation process.

Regulatory proposal

ECHA's final regulatory proposal is submitted.

Entry into force

Expected entry into force of PFAS regulation

6 months after entry into force: Restriction of the placing on the market of extinguishers according to EN 3-7, EN 1866 and 16856, with fire extinguishing foams containing PFAS.

18 months after entry into force: Practical fire protection exercises with fire extinguishers containing PFASs are no longer permitted.

36 months after entry into force: Prohibition for use in civil shipping.

General ban

Expected expiry of the transitional period for portable fire extinguishers according to EN 3-7.

General ban on the use of fire extinguishers containing fluorine.



The fluorine-free GLORIA foam charging fire extinguishers in the STAR-Version



In order to be prepared for the upcoming developments, we present to you today the first portable GLORIA fluorine-free foam fire extinguishers with a performance focus on B fires.

These are completely fluorine-free foam charging fire extinguishers with semi-automatic fitting and extinguishing pistol, approved according to DIN EN 3 for fire classes A and B.

The GLORIA semi-automatic fitting has been designed for intuitive use. Inimitable and typical of GLORIA, the fitting gives the units a forward-looking, compact appearance. Performance, economy and design form a postmodern symbiosis in this series.

■ Main advantages of the STAR-LINE

- Intuitive and therefore lightning-fast to use: unlock, simply lift the handle - done!
- Robust carrying handle made of glass fibre reinforced plastic with ergonomic carrying properties.
- Laser-welded pressurised Cylinder.
- Exterior with hard-wearing polyester resin powder coating.
- Durable plastic inner coating to protect against corrosion.
- Approved in accordance with the Pressure Equipment Directive 2014/68/EU (CE).

- Uniform, high-strength, glass fibre-reinforced special plastic valve body.
- High temperature, ozone and UV resistant.
- Also highly resistant to chemicals, moisture and corrosion.
- Standardised threaded ring, thread size M74x2.
- Uniform, black anodised metal union nut.
- Internal propellant bottle with stainless steel adapter and corrosion-resistant plastic coating. (technical data marked with resistant laser printing)

■ Details and features of the STAR-LINE

Foam-charged fire extinguisher SKA+ 

- High extinguishing performance on A and B fires
- Separate storage of foam concentrate in pre-assembled cartridge and additional water additives.
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Backfires are largely suppressed

Cartridge operated foam fire extinguisher SKE 

- High ease of maintenance, no additives in the water
- Impressive extinguishing performance on A and B fires
- Separate storage of the foam concentrate in pre-assembled cartridge
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Reignitions are largely suppressed

Model	Art.-No.	Extinguishing agent	Type	Agent	Extinguishing performance LE*	Spraying range/-duration	Temperature range	Total weight	H/W/D in holder ø – Cylinder
SKA+ 6 STAR	811661.0035	Foam concentrate in cartridge + water + additives	S 6 H	CO ₂	34A 144B 10 9	ca. 4,5 m ca. 60 sec.	5 °C to +60 °C	ca. 10,1kg	ca. 540/280/165 mm ø 150 mm
SKA+ 9 STAR	811671.0035	Foam concentrate in cartridge + water + additives	S 9 H	CO ₂	43A 183B 12 12	ca. 4,5 m ca. 80 sec.	5 °C to +60 °C	ca. 15,3 kg	ca. 575/280/205 mm ø 190 mm
SKE 6 STAR	811661.0000	Foam concentrate in cartridge + water	S 6 H	CO ₂	21A 113B 6 6	ca. 4,5 m ca. 35 Sec.	5 °C to +60 °C	ca. 10,1 kg	ca. 540/280/165 mm ø 150 mm
SKE 9 STAR	811671.0000	Foam concentrate in cartridge + water	S 9 H	CO ₂	27A 183B 9 12	ca. 4,5 m ca. 35 Sec.	5 °C to +60 °C	ca. 15,3 kg	ca. 575/280/205 mm ø 190 mm

* Extinguishing agent units. If fire extinguishers are intended for both fire classes A+B, the lower LE value applies for the calculation.

The fluorine-free GLORIA foam-charged fire extinguishers in the PRO version



These are completely fluorine-free foam chargeable fire extinguishers with impact button release and extinguishing pistol, approved according to DIN EN 3 for fire classes A and B.

The classic push-button fitting, which is particularly popular in the commercial sector, in combination with the rotatable and lockable extinguishing pistol, characterises this series in the unmistakable GLORIA design.

■ Product features

- Tried-and-tested GLORIA push button fitting.
- Robust handle made of glass-fibre reinforced plastic with ergonomic carrying properties.
- Laser-welded pressure vessel.
- Exterior with durable polyester resin powder coating.
- Durable plastic interior coating to protect against corrosion.
- Approved according to Pressure Equipment Directive 2014/68/EU (CE).
- Uniform, high-strength, glass-fibre reinforced special plastic valve body.
- High temperature, ozone and UV resistant.
- In addition, high chemical resistance, moisture-resistant and corrosion-free.
- Uniform threaded ring, thread size M74x2.

- Uniform, black anodised metal union nut.
- Internal propellant bottle with stainless steel adapter and corrosion-resistant plastic coating. (technical data marked with resistant laser printing)
- Ageing-resistant, LABS-free quality hose cable with fabric insert made of synthetic rubber material.
- Rotatable and stoppable extinguishing gun for optimal fire fighting.
- Robust, impact-resistant plastic foot ring with hose nozzle holder ensures stability and protection of the unit against damage and corrosion.
- Special foam pipe with high area coverage enables optimum application of the extinguishing agent.

■ **Details and features of the Pro-LINE**

Foam-charged fire extinguisher SKA+ 

- High extinguishing performance on A and B fires
- Separate storage of foam concentrate in pre-assembled cartridge and additional water additives.
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Backfires are largely suppressed

SB foam chargeable fire extinguisher 

- High extinguishing performance on B-fire with only 6 litres capacity
- GLORIA bio-foam with impregnating effect on fire source and surroundings
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Backfires are largely suppressed

Foam chargeable fire extinguisher SKE 

- High ease of maintenance, no additives in the water
- Convincing extinguishing performance on A and B fires
- Separate storage of the foam concentrate in pre-assembled cartridge
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Backfires are largely suppressed

Model	Art. No.	Extinguishing agent	Type	Agent	Extinguishing performance LE*	Spraying range/-duration	Temperature range	Total weight	H/W/D in holder ø – Cylinder
SKA+ 6 PRO	811641.0035	Foam concentrate in cartridge + water + additives	S 6 H	CO ₂	34A 144B 10 9	ca. 4,5m ca. 60 sec.	+5 °C to +60 °C	ca. 10,1kg	ca. 550/280/165 mm ø 150 mm
SKA+ 9 PRO	811651.0035	Foam concentrate in cartridge + water + additives	S 9 H	CO ₂	43A 183B 12 12	ca. 4,5m ca. 80 sec.	+5 °C to +60 °C	ca. 15,3 kg	ca. 585/280/205 mm ø 190 mm
SKE 6 PRO	811641.0000	Foam concentrate in cartridge + water	S 6 H	CO ₂	21A 113B 6 6	ca. 4 m ca. 35 sec.	+5 °C to +60 °C	ca. 10,1kg	ca. 550/280/165 mm ø 150 mm
SKE 9 PRO	811651.0000	Foam concentrate in cartridge + water	S 9 H	CO ₂	27A 183B 9 12	ca. 4 m ca. 35 sec.	+5 °C to +60 °C	ca. 15,3 kg	ca. 585/280/205 mm ø 190 mm
SB 6 PRO	813731.0000	Premix	S 6 H	N ₂	21A 183B 6 12	ca. 4,5 m ca. 70 sec.	+5 °C to +60 °C	ca. 10,1 kg	ca. 550/280/165 mm ø 150 mm
SB 9 PRO	813741.0000	Premix	S 9 H	N ₂	27A 183B 9 12	ca. 4,5 m ca. 90 sec.	+5 °C to +60 °C	ca. 15,3 kg	ca. 585/280/205 mm ø 190 mm

* Extinguishing agent units. If fire extinguishers are intended for both fire classes A+B, the lower LE value applies for the calculation.

The fluorine-free GLORIA foam-charged fire extinguishers in the EASY version



Simplicity and safety are not a contradiction in the EASY-LINE, but a long-standing concept.

The clear focus on the essentials without saving on safety and performance has been impressively implemented in the design of the EASY-LINE.

■ Product features

- Large performance portfolio within the extinguishing agents foam (6 and 9 l), water (6 and 9 l), grease fire (3 and 6 l) and powder (6, 9 and 12 kg)
- Uniform operating elements throughout
- Good wearing properties due to stable hand lever
- Uniform, high-strength, glass-fibre reinforced special plastic valve body. Also robust, tensile strength, stable, high chemical resistance, moisture-resistant, corrosion-free, high temperature resistance, UV-resistant.
- All valve components with standardised screw connection
- Uniform threaded ring M 74
- Uniform, black anodised metal union nuts
- Ageing resistant hose assembly

■ Details and features of the EASY-LINE

Foam-charged fire extinguisher SKA+

- High extinguishing performance on A and B fires
- Separate storage of foam concentrate in pre-assembled cartridge and additional water additives.
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Backfires are largely suppressed

Cartridge operated foam fire extinguisher SKE

- High ease of maintenance, no additives in the water
- Impressive extinguishing performance on A and B fires
- Separate storage of the foam concentrate in pre-assembled cartridge
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Reignitions are largely suppressed

Model	Art. No.	Extinguishing agent	Type	Agent	Extinguishing performance LE*	Spraying range/-duration	Temperature range	Total weight	H/W/D in holder ø – Cylinder
SKA+ 6 EASY	814121.0035	Foam concentrate in cartridge + Water + additives	S 6 H	CO ₂	34A 144B 10 9	ca. 4 m ca. 54 sec.	+5 °C to +60 °C	ca. 10,1 kg	ca. 600/310/165 mm 150 mm
SKA+ 9 EASY	814131.0035	Foam concentrate in cartridge + Water + additives	S 9 H	CO ₂	43A 183B 12 12	ca. 4 m ca. 80 sec.	+5 °C to +60 °C	ca. 15,5 kg	ca. 620/290/205 mm 190 mm
SKE 6 EASY	811681.0000	Foam concentrate in cartridge + water	S 6 H	CO ₂	21A 113B 6 6	ca. 4 m ca. 35 Sec.	+5 °C to +60 °C	ca. 10,1 kg	ca. 600/310/165 mm 150 mm
SKE 9 EASY	811691.0000	Foam concentrate in cartridge + water	S 9 H	CO ₂	27A 183B 9 12	ca. 4 m ca. 35 Sec.	+5 °C to +60 °C	ca. 15,5 kg	ca. 620/290/205 mm 190 mm

* Extinguishing agent units. If fire extinguishers are intended for both fire classes A+B, the lower LE value applies for the calculation.

The fluorine-free GLORIA foam continuous pressure fire extinguishers



Portable, completely fluorine-free foam continuous pressure fire extinguisher with hand lever release, approved according to DIN EN 3 for fire classes A and B.

■ Main advantages of the continuous pressure fire extinguishers

- Ready for immediate use after the safety pin is pulled out
- Practical devices of the standard class with high extinguishing capacity
- Easy to use hand lever release - for carrying and releasing at the same time
- Extinguishing agent cylinder made of high-quality steel
- Hose line resistant to aging

■ Details and performance features of the continuous pressure fire extinguishers

- Outside with weather-resistant and durable 100% polyester resin coating
- Holder for extinguishing nozzle integrated into foot ring
- Durable brass fitting with integrated test valve
- With wall bracket
- Suitable for electrical installations up to 1000 volts at a minimum distance of 1 m

SDB 6 . SDB 9 

- High extinguishing performance (183B) on B-fire (12LE) with only 6 litres capacity.
- GLORIA bio-foam with impregnating effect on the source of the fire and the surrounding area
- Special foam nozzle with high surface coverage, enables optimum application of the extinguishing agent.
- Reignitions are largely suppressed.

SD 6 P . SD 9 P . SD 6 E . SD 9 E 

- High extinguishing performance on A and B fires (SD 6/9 P)
- GLORIA bio-foam with impregnating effect on the source of the fire and surroundings
- Special foam nozzle with high surface coverage enables optimum application of the extinguishing agent
- Reignitions are largely suppressed

Model	Art.-No.	Extinguishing agent/ quantity	Type	Agent	Extinguishing performance LE*	Spraying range/- duration	Temperature range	Total weight	H/W/D in holder ø – Cylinder
SDB 6	813681.0000	Premix	S 6 L	N ₂	21A 183B 6 12	ca. 4 m ca. 42 Sek.	5 °C bis +60 °C	ca. 10,5 kg	ca. 540/275/182 mm ø 170 mm
SDB 9	811741.0000	Premix	S 9 L	N ₂	27A 183B 9 12	ca. 4 m ca. 65 Sek.	5 °C bis +60 °C	ca. 14,6 kg	ca. 617/300/202 mm ø 190 mm
SD 6 P	813681.0035	Premix	S 6 L	N ₂	34A 144B 10 9	ca. 4 m ca. 35 Sek.	5 °C bis +60 °C	ca. 10,5 kg	ca. 540/275/182 mm ø 170 mm
SD 9 P	811741.0035	Premix	S 9 L	N ₂	43A 183B 12 12	ca. 4 m ca. 48 Sek.	5 °C bis +60 °C	ca. 14,6 kg	ca. 617/300/202 mm ø 190 mm
SD 6 E	814222.0000	Premix	S 6 L	N ₂	21A 113B 6 6	ca. 4 m ca. 35 Sek.	5 °C bis +60 °C	ca. 10,5 kg	ca. 540/275/182 mm ø 170 mm
SD 9 E	814232.0000	Premix	S 9 L	N ₂	27A 183B 9 12	ca. 4 m ca. 48 Sek.	5 °C bis +60 °C	ca. 14,6 kg	ca. 617/300/202 mm ø 190 mm

* Extinguishing agent units. If fire extinguishers are intended for both fire classes A+B, the lower LE value applies for the calculation.

The fluorine-free GLORIA foam extinguishers



The large mobile extinguishers with high extinguishing efficiency are particularly suitable for areas with high fire spread such as hazardous materials stores, laboratories, transformers, and in all areas of aviation.

■ Main advantages of the mobile foam extinguishers

- Certified according to EN 1866
- Designed for practical use by one person
- Space-saving accommodation of the hose line around the extinguishing agent Cylinder
- Rotatable and adjustable extinguishing pistol enables targeted fire fighting
- Extinguishing agent Cylinder completely made of "stainless" steel
- Tilt resistant due to optimal center of gravity
- Film-forming extinguishing agent, especially suitable for liquid fires

■ **Details and performance features of the mobile foam extinguishers**

- Outside with weather-resistant and durable coating
- Large wheels (30 cm), ideal for height differences
- Depending on the Type, optional 5 or 10 m high-pressure hose for flexible use
- Built-in safety valve in locking fitting
- Safe storage of the N² propellant bottle in the retaining bracket

SEF 50 S . SDE 50 S 

- Fluorine-free
- MED approval
- Standardised extinguishing gun with foam tube
- With extinguishing gun, also for electrical systems up to 1000 volts / minimum distance 1 m
- Pressure content product less than 1000, therefore no ZÜS test necessary

SK 50 S 

- Type SK with environmentally friendly, easy-to-maintain piston cartridge
- With steering control for maximum manoeuvrability, even at hard-to-reach sources of fire
- Separate storage of foam concentrate and water thanks to patented piston cartridge
- Environmentally friendly maintenance and easy refilling of the extinguisher
- The mobile fire extinguisher can be reused when refilling
- Long-lasting foam concentrate with consistently high extinguishing performance
- 100% mixing of the extinguishing agent thanks to the piston principle, even with high viscosity
- Type SK 50 S with maritime approval (MED)
- Pressure content product less than 1000, therefore no ZÜS test necessary
- Suitable for electrical systems up to 1000 volts / minimum distance 1 m

Model	Art.-No.	Extinguishing agent/ quantity	Type	Agent	Extinguishing performance LE*	Spraying range/- duration	Tempera- ture range	Total weight	H/W/D in holder ø – Cylinder
SK 50 S	5 m: 810868.2969 10 m: 810869.2969	Foam concentrate + water	S 50 H	N ₂	IV B 50	ca. 8 m ca. 300 sec.	5 °C to +60 °C	ca. 84 kg	1050/565/675 mm ø 400 mm
SEF 50 S	5 m: 810896.2851 10 m: 810899.2851	Premix	S 50 H	N ₂	IV B 50	ca. 8 m ca. 270 sec.	5 °C to +60 °C	ca. 82 kg	1150/475/570 mm ø 315 mm
SDE 50 S	5 m: 810870.2851 10 m: 810871.2851	Premix	S 50 L	N ₂	IV B 50	ca. 8 m ca. 240 sec.	5 °C to +60 °C	ca. 80 kg	1140/450/550 mm ø 315 mm

* Extinguishing agent units. If fire extinguishers are intended for both fire classes A+B, the lower LE value applies for the calculation.

The GLORIA concept for sustainable fire fighting

The new GLORIA fluorine-free foam fire extinguishers offer several advantages and technical features.



Extremely environmentally friendly quality foam

Made in Europe, with non-fluorinated water additives and 100% bio-based surfactants of the latest generation. Contains no environmentally harmful PFOS or PFOA and is free of silicones.



Innovative extinguishing agent

Easily biodegradable



Special nozzle on portable models

Developed for the special requirements of B fires with fluorine-free foams



GLORIA „Fluorine-free-logo“

Special labelling with the GLORIA „Fluorine-free“-logo - a clear distinguishing feature from existing fluorine-containing foam fire extinguishers.



Can be used on electrical installations

... up to 1000V, minimum distance 1m
(for higher voltage observe DIN VDE 0132)



Particularly powerful on the B-fire

183B (12 LE) for selected portable models and IV B (50 LE) for the mobile models

The GLORIA concept for sustainable fire fighting

Areas of Use

- Chemistry and petrochemistry
- Warehouse
- Airports
- Hospitals, medical facilities, nursing homes
- Industrial Areas
- Administrative and Manufacturing areas
- Hotels
- Offices

GLORIA Plea:

The future is fluorine-free

Fluorine-free foam extinguishers as well as modern high-performance water extinguishers will shape the image of our workplaces, especially indoors.

Specialist planners will design fire protection concepts in a more differentiated way and according to environmental aspects. Hazard assessments will be more rationally oriented towards fire risks and loads in individual company sections.

A mix of different extinguishing agents with the same fire extinguisher release fittings can mean custom-fit solutions for companies and at the same time be ecologically balanced and economical.

GLORIA is guaranteed to provide you with competent and future-oriented advice.



The fluorine-free GLORIA cartridge-operated water extinguisher range.

On our website www.gloria.de we give you an overview of our fluorine-free products and you can find more information about our concept „Wet Extinguishers in Transition“.

We have compiled the answers to the most important questions for you in an FAQ document „Wet extinguishers in transition“, which you can view using the QR code on the right.

If you have any further questions, please do not hesitate to contact us at any time. Please contact us by phone or e-mail.



GLORIA®

Safety First

For more than seven decades, we have been the right contact for questions about preventive fire protection products. During this time, we have been able to gain a lot of experience, optimise our products and adapt them to current requirements.

Our focus are fire extinguishers, of which we offer a wide range of portable and mobile models.

Another main focus is on our smoke and CO detectors from our own production. These are highly reliable and come with manufacturer's warranties of up to 10 years. With our sophisticated range of accessories and spare parts, we create the safety you need.

The portfolio is rounded off by both internal and external training courses and seminars. Especially with our VR Fire Trainer, we are breaking new ground and setting the course for a new type of fire extinguishing training in the virtual world.



Portable Fire Extinguishers



Mobile Extinguishers



Smoke detectors



CO detectors



**Training, Seminars,
Information**



**Accessories, Spare Parts,
Extinguishing water systems „dry“**



VR Fire Trainer

Presented by:

Carrier Manufacturing Poland sp. z o.o.
ul. Kolejowa 24, 39-100 Ropczyce
Telephone +48 667 660 608
info@gloria.de | www.gloria.de