

**STRENGTHENS
THE SURFACE
STRUCTURE**



**PROTECTS
AGAINST
MOISTURE**



**REDUCES
NOISE**



**CURES
FAST**

PUREX BOX

USER MANUAL

Table of contents

1. Elements of the PUREX BOX set	3
2. Safety measures	4
3. Preparation of the spray system	4
4. Use of the spray system	4
5. Emptying used cylinders.....	5
6. Application conditions.....	5
7. Storage and transport.....	6
8. Troubleshooting	6
9. First Aid.....	6
10. Foam performance characteristics*.....	6
11. Visual instructions.....	7



ATTENTION! Before using the PUREX BOX spray system, it is the User's responsibility to read the user manual carefully and to follow the instructions for use contained therein.

1. Elements of the PUREX BOX set

- Two steel cylinders: green (A) and black (B)
- PUREX GUN gun equipped with hoses and 3 nozzles with mixer
- User manual
- PUREX BOX accessory kit with useful parts for working with the system



PUREX GUN with hoses



nozzle with mixer



Types of systems

The Purex Box system is available in two volumes, depending on the combined net weight of the two cylinders A and B:

System name	PUREX BOX SEMI	PUREX BOX PRO
Net weight of the set	20,6 kg	45,1 kg
Cylinder A (net weight)	10,4 kg	22,5 kg
Cylinder B (net weight)	10,2 kg	22,6 kg
System capacity	0,5–0,6 m ³ of foam*	1,1–1,3 m ³ of foam*

* Performance data was obtained when foaming the system under design conditions. When foaming under other conditions, it is possible to obtain slightly different results.

Composition of the PUREX BOX kit



INDUSTRIAL-GRADE PETROLEUM JELLY



GOOGLES



HOSE CLEANING ADAPTER



PUREX BOX CLEAN



PROTECTIVE MASK



5/8 SPANNER



PROTECTIVE GLOVES



PROTECTIVE SUIT

2. Safety measures

Always wear gloves, goggles and protective clothing when working. Use PUREX BOX only with adequate ventilation or adequate respiratory protection. This product should not be used in poorly ventilated areas unless a gas mask with a suitable filter (e.g. type A1 according to EN 14387) is used.



WEAR PROTECTIVE
GOGGLES

3. Preparation of the spray system

1. Unpack the accessories and the gun from the kit and unwrap the hoses completely. Visually check that the discharge points in the gun are unobstructed. Lubricate the gun threads with petroleum jelly and screw on the nozzle (equipped with a mixer). Tighten the nozzle as far as possible.
2. Shake the bottles thoroughly for a minimum of 2 minutes.
3. Screw the gun hoses with a 5/8 spanner onto the cylinder valves. NOTE: Screw the hose with the green band to the green cylinder (cylinder A) and the hose with the black band to the black cylinder (cylinder B).
4. Before opening the cylinder valves, check that the hoses are screwed on tightly.
5. Next, unscrew the valve of the green cylinder and the black cylinder to the maximum (you may notice the appearance of the components in the hoses during this operation).



4. Use of the spray system

1. The surface to be sprayed should be completely dry and degreased, free of dust and loose particles.
2. Before applying the foam, take a test shot into a waste bag to verify its quality. To start spraying, pull the trigger of the gun as far as possible.
3. It is recommended that the thickness of a single layer of foam should be between 30-70 mm, with a time interval of 5-10 minutes between spraying successive layers. In case of outdoor applications, the top layer of foam should be protected with a UV-resistant layer using suitable barriers, e.g. foils, membranes or paints dedicated to this application. The foam achieves its final properties after 24 hours.
4. After any interruption during application longer than 30 seconds, the nozzle should be

unscrewed and cleaned with Purex Box Clean. In addition, the outlet holes in the gun body should be cleaned. After cleaning, the nozzle can be reused by screwing it onto the thread in the same way as before.

5. In addition, note that if there is an involuntary interruption of at least 30 minutes during continuous application, point 4 must be repeated and cylinders A and B mixed again.
6. When the application is complete, turn off the cylinder valves as far as possible and then drain the remaining contents in the hoses by pulling the gun trigger as far as possible (with the nozzle unscrewed and cleaned beforehand). Next, unscrew the previously installed hoses using a 5/8 spanner.
7. Screw the adapter together with Purex Box Clean to the hose ends and clean the gun and hoses (pull the gun trigger as far as possible until you observe that the hoses are clean). Then, after cleaning the nozzle and the gun with the hoses, clean the cylinder valves with Purex Box Clean.
8. The gun with nozzle and hoses is reusable, so it is essential that the applicator and accessories are thoroughly cleaned before and after each application.

5. Emptying used cylinders

Cylinders should be vented and the remaining contents (a small amount of raw material) emptied into a waste bag. Empty cylinders should not be disposed of with household waste. Dispose of as waste in accordance with national and local regulations using professionally licensed hazardous waste disposal companies. Review regulations to ensure proper compliance with national and local laws.



HAND OVER EMPTY CYLINDERS FOR DISPOSAL TO AUTHORISED COMPANIES!



DO NOT DISPOSE OF CYLINDERS WITH HOUSEHOLD WASTE!



DO NOT UNSCREW THE VALVES AND DO NOT REFILL THE CYLINDER!

6. Application conditions

Ensure that the contents of the cylinder are at a temperature between +20°C and +30°C during application. The ambient temperature during application should be between +10°C and +30°C. The recommended temperature of the surface to be sprayed is +15°C - +40°C.

7. Storage and transport

Cylinders should be transported and stored at +10 - +30°C. Protect from moisture and sunlight. Store in a well-ventilated place. If stored under recommended conditions, shelf life for both cylinders of the system is 6 months from date of manufacture.

8. Troubleshooting

1. If the spray pattern changes during operation, the problem may be that the foam is being dispensed through a dirty nozzle. If this happens, unscrew the nozzle and clean it again. The nozzle and mixer should be checked each time they are screwed in.
2. If the foam does not react properly (does not rise), the nozzle should be cleaned first or a new nozzle should be fitted (the thread should be re-lubricated with petroleum jelly). Usually, replacing the nozzle or cleaning it solves the problem.
3. If the problem persists, unscrew the nozzle and carefully squeeze the trigger of the gun so that two raw material streams appear. If one of the streams is blocked, close the tank valve on the side that flows properly and pull the trigger with full force for 15 seconds.
4. Once the blockage has cleared, clean the gun's discharge lines and install the nozzle. Then open all valves to the maximum and carry out a test shot into the waste container, after which the foam quality should be checked.
5. If problems persist, stop the application and unscrew the hoses from the cylinder valves. Clean the entire gun including the nozzle and hoses (see section: USE OF THE SPRAY SYSTEM). Then connect the applicator according to the kit preparation instructions and carry out a test shot of the foam to verify its quality. If a particular treatment does not solve the problem, contact Polychem Systems technical service.

9. First Aid

Refer to the Material Safety Data Sheets (MSDS) to learn more about the hazards and first aid measures.

10. Foam performance characteristics*

Minimum density of the foam core in the product [kg/m ³]	30
Fire resistance classification acc. to EN 13501-1+A1	Class E
Flammability acc. to DIN 4102	B2

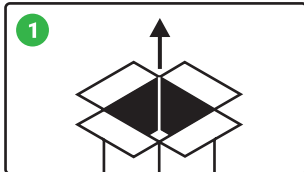
*Notes

- The data contained in this note was obtained during foaming of the system under design conditions. When foaming under other conditions, it is possible to obtain slightly different results.
- Polychem Systems provides assistance in the implementation of the system and its application at the Customer's site.
- Each time, the user is obliged to check the suitability of the product and auxiliary agents for his or her application.
- The User is obliged to possess an up-to-date safety data sheet and technical data sheet of the product, which is provided by the manufacturer at the moment of sale and on each request of the Customer.
- Before processing, it is the User's responsibility to read the aforementioned documentation carefully and to adhere to the principles of product handling contained therein.

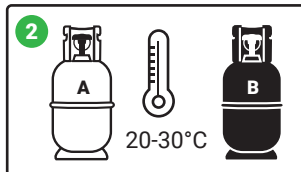
11. Visual instructions

ATTENTION! The visual instructions are for illustrative purposes only. Before using the system, read the USE OF THE SPRAY SYSTEM section.

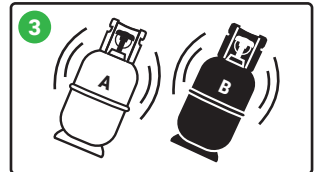
PREPARATION OF THE SPRAY SYSTEM



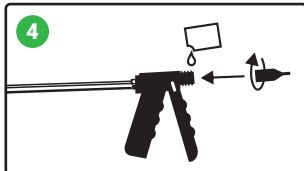
1 Unpack the accessories and the gun from the kit and unwrap the hoses completely.



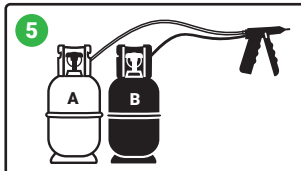
2 Make sure the temperature of the cylinder is 20-30°C.



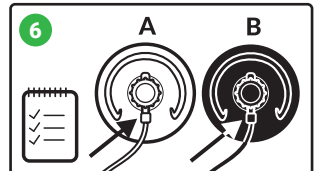
3 Shake both cylinders thoroughly for a minimum of 2 minutes.



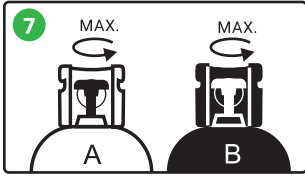
4 Lubricate the gun threads with industrial-grade petroleum jelly and screw on the nozzle with the mixer.



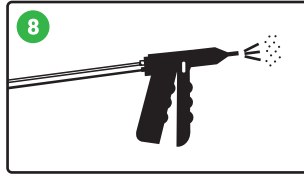
5 Screw the gun hoses onto the corresponding cylinder valves A and B.



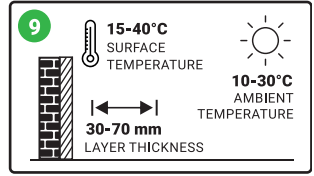
6 Before unscrewing the cylinder valves, check that the hoses are screwed on tightly.



Unscrew the cylinder valves to the maximum.



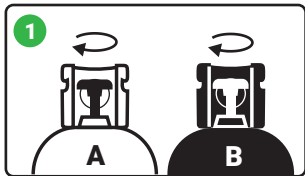
Take a test shot into a waste bag to verify the foam's quality.



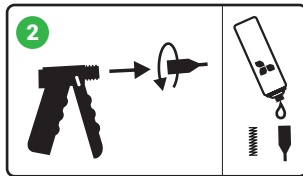
Remember to maintain the correct thickness of the foam layer and the correct ambient and sprayed surface temperature.

MAINTANCE AFTER WORK

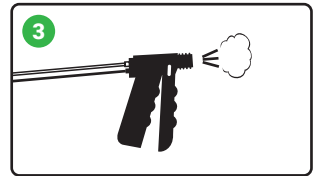
The gun with nozzle and hoses is reusable. Remember to clean the applicator and accessories thoroughly before and after each use!



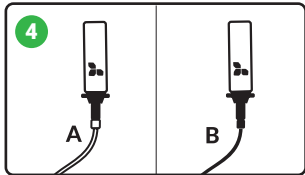
Unscrew the cylinder valves.



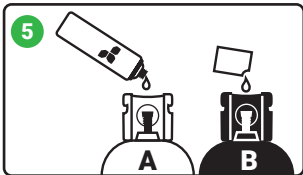
Unscrew the nozzle with the mixer and clean both components thoroughly with PUREX BOX CLEAN.



Discharge the pressure by pressing the trigger of the gun.



Clean both hoses with PUREX BOX CLEAN connected via an adapter.



Clean the valves of the green (A) and black (B) cylinders with PUREX BOX CLEAN. Apply industrial-grade petroleum jelly.



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POLYCHEM SYSTEMS
PUREX BOX

Purex Box jest dwuskładnikową pianką prostą, przeznaczoną do stosowania w profesjonalnym zestawie natryskowym. Umożliwia łatwe użytkowanie oraz sprężenie i wyjątkowej jakości w dowolnym miejscu.

PRZED UŻYCIEM DOKŁADNIE WYKONAJCZ
ORAZ ZAPOMNIĆ SIĘ Z INSTRUKCJĄ UŻYTKOWANIA
NIE NAPEŁNIAĆ PONOWNIE

764

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Purex Box is a portable spray system for two-component polyurethane foam, enabling quick and professional application without the need for specialist equipment. The kit consists of two pressure vessels cylinder A (green) and cylinder B (black), equipped with a gun that acts as an applicator. Polyurethane foam is formed in the gun's mixer, as a result of a chemical reaction between the mixing components. It is rapidly dispersed by means of a nozzle screwed onto the end of the gun. The system has a wide range of applications and shows excellent adhesion to materials such as concrete, plaster, brick, wood, metal and most plastics.



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