

PERI Bio-Clean Concrete release agent

Translation of the Original Instructions for Use - Issue 12/2023



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Overview

Product description

PERI Bio-Clean

- is a semi-synthetic, non-water-miscible concrete release agent,
- is free of solvents and mineral oils,
- is free of hydrocarbons,
- is economical to use, therefore it is particularly cost-effective,
- is easily biologically degradable and is Blue Angel-certified according to DE-UZ 178,
- has de-watering properties,
- is free of silicone and waxes.

Typical characteristic values

		Standard/Guideline
Physical state	liquid	
Colour	yellow, clear	
Odour	characteristic	
Pour point	> -12 °C	ASTM D 7346
Flashpoint	> 160 °C	DIN EN ISO 2592
Density – at 15 °C	0.89 g/cm ³	DIN EN ISO 12185
Water solubility	insoluble	
Kin. viscosity – at 20 °C	14.5 mm ² /s	ASTM D 7042
Water hazard class	WHC 1 – minor water hazard	Statutory provision – Ordinance on Facilities for Handling Substances Hazardous to Water (AwSV)
Working temperature	0 °C to 60 °C	
GISCODE/product code	BTM 10	

Key

Pictogram | Definition



Danger/Warning/Caution



Note



To be complied with



Tip



Safety gloves



Safety goggles



Protective clothing



Safety masks

Dimensions

Dimensions are usually given in cm. Other measurement units, e.g. mm, are shown in the illustrations.

Load details are usually given in kg. Other measurement units, e.g. t, are shown in the illustrations.

Conventions

- Instructions are numbered with: 1., 2., 3.
- The result of an instruction is shown by:
→

Safety instructions

Safety instruction categories

The safety instructions alert site personnel to the risks involved and provide information on how to avoid these risks. Safety instructions can be found at the beginning of the section or before instructions for action and are highlighted as follows:



DANGER

This sign indicates an extremely hazardous situation which, if not avoided, will result in death or serious, irreversible injury.



WARNING

This sign indicates a hazardous situation which, if not avoided, could result in death or serious, irreversible injury.



CAUTION

This sign indicates a hazardous situation that could result in minor or moderate injury if the safety instructions are not followed.



NOTE

This sign indicates situations in which failure to observe the information can result in material damage.

Format of the safety instructions



SIGNAL WORD

Type and source of hazard!
Consequences of non-compliance.
⇒ Preventative measures.

Safety instructions

General information

When using PERI Bio-Clean, the Instructions for Use are to be complied with at all times!

All current regulations and guidelines applicable in countries where our products are used and tested must be observed, see also the safety data sheet.





The contractor must ensure that the Instructions for Use provided by PERI are available at all times for the users and that they are fully understood!

The contractor may only entrust the independent use of concrete release agents to personnel who are familiar with these tasks!

The PERI Bio-Clean concrete release agent is to be used as intended so that persons are never put at risk in any way, e.g. observe the wind direction!

Personal protective equipment

The contractor must ensure that the required personal protective equipment (PPE) is available and used as intended. The PPE consists of:

-  Safety gloves
-  Safety goggles
-  Protective clothing
-  Safety masks

For more detailed information on PPE, see the safety data sheet.

Safety instructions

Product-specific

When complying with the general rules of occupational safety and industrial hygiene, there is no risk to the health of the personnel when using this product.

If swallowed, follow the instructions in the safety data sheet.

Fire fighting measures



DANGER

If a fire breaks out, hazardous decomposition products such as carbon monoxide and carbon dioxide are produced.

Do not inhale explosion or combustion gases.

⇒ Wear self-contained breathing apparatus.

For further information on fire fighting, see the safety data sheet.

Intended use

PERI products have been designed to be used exclusively in industrial and commercial sectors only by suitably trained personnel!

PERI Bio-Clean is used as a concrete release agent.

PERI Bio-Clean is suitable for use on

- commercially available formwork and construction site equipment,
- heated formwork,
- non-absorbent or low-absorbent formlining, e.g. formwork panels coated with phenolic resin,
- solid plastic panels,
- plastic-coated formlining.

Instructions for Use

Use in a way not intended, deviating from the standard configuration or the intended use set forth in the Instructions for Use, represents a misapplication with a potential safety risk.

Changes to PERI components are not permitted.

Only PERI original components may be used. The use of other products and spare parts, represents a misapplication with a potential safety risk.

Before it is used for the first time, spray the side surfaces and the frame side of the formwork elements with concrete release agent.

Spray the formlining immediately after de-shuttering. PERI Bio-Clean dissolves adhering concrete, thereby reducing the cleaning effort.

If used correctly, any subsequent processing of the concrete surfaces through plastering, wallpaper, paints and ceramics will not be adversely affected.

PERI Bio-Clean is supplied ready-to-use in 20 l plastic canisters or 208 l metal drums.

Use a suitable pumping system to extract PERI Bio-Clean from the 208 l metal drum.

Additional technical documentation

- Instructions for Use:
 - PERI Clean
 - PERI Plasto-Clean
 - Release agent pressure sprayer
- Safety data sheet:
Scan or click on the QR code to access the current issue of the safety data sheet.



<https://peri.link/safety-data-sheet>

Target groups

Contractors

These instructions for use are intended for contractors who

- assemble, modify and dismantle PERI products, or
- use them, e.g. for concreting, or
- allow them to be used, e.g. for forming operations.

Construction site coordinator

The Safety and Health Protection Coordinator*

- is appointed by the client,
- must identify potential hazards during the planning phase,
- determines measures that provide protection against risks,
- creates a safety and health protection plan,
- coordinates the protective measures for the contractor and site personnel so that they do not endanger each other,
- monitors compliance with the protective measures.

Competent personnel

Due to the specialist knowledge gained from professional training, work experience and recent professional activity, the competent person qualified to carry out inspections has a reliable understanding of safety-related issues and can carry out inspections correctly. Depending on the complexity of the inspection to be undertaken, e.g. scope of testing, type of testing or the use of certain measuring devices, a range of specialist knowledge is necessary.



- **In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!**
- **If no country-specific regulations are available, it is recommended to proceed according to German guidelines and regulations.**

* Valid in Germany: Regulations for Occupational Health and Safety on Construction Sites 30 (RAB 30).

Qualified personnel

PERI products may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. Qualified personnel must have completed a course of training** in the work to be performed, covering the following points at least:

- Explanation of the plan for the assembly, modification or dismantling of the PERI product in an understandable form and language.
- Description of the measures necessary to safely assemble, modify or dismantle the PERI product.
- Designation of the preventive measures to be taken to avoid the risk of persons and objects falling.
- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the PERI product, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.

** Instructions are given by the contractor themselves or a competent person selected by them.

Apply using a release agent pressure sprayer



NOTE

The guide value for the application quantity is dependent on the type of formlining: 20 g/m².

Excessive quantities may lead to staining, flaking or sanding of the concrete surface.



- When using a concrete release agent pressure sprayer, the PERI Bio-Clean concrete release agent may only be used outdoors, e.g. on the construction site.
- Wear personal protective equipment. The PPE consists of:
 - Safety goggles
 - Safety gloves
 - Protective clothing
 - Safety masks
- Open the container carefully.
- The working pressure of the release agent pressure sprayer is approx. 3 bar.
- For instructions on how to use the release agent pressure sprayer, see the Instructions for Use supplied by the manufacturer.
- PERI Bio-Clean concrete release agent can also be applied by hand when used outside. However, we do not recommend it, because it is difficult to distribute evenly.



To ensure that the release agent is evenly distributed on the formlining, we recommend applying the release agent to the formwork unit when it is in a horizontal position. (Fig. 01)

Application

1. Apply concrete release agent thinly and evenly by means of the flat spray nozzle attached to the release agent pressure sprayer.
2. Remove excess concrete release agent with a standard rubber scraper, e.g. a scraper edge.
3. Wipe the formlining, for example with a cloth.

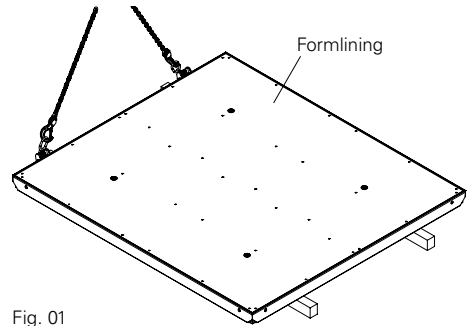


Fig. 01

Application by hand

Alternatively, the release agent can be applied by hand using the following:

- Brush
- Roller
- Cloth



- When used inside, e.g. in closed rooms or halls, PERI Bio-Clean concrete release agent may only be applied by hand – not using the release agent pressure sprayer.
- Wear personal protective equipment. The PPE consists of:
 - Safety goggles
 - Safety gloves
 - Protective clothing
 - Safety masks
- The guide value for the application quantity is dependent on the type of formlining: 20 g/m². Excessive quantities may lead to staining, flaking or sanding of the concrete surface.



To ensure that the release agent is evenly distributed on the formlining, we recommend applying the release agent to the formwork unit when it is in a horizontal position. (Fig. 02)

Application

1. Apply the concrete release agent thinly and evenly using a brush, roller or cloth.
2. Remove excess concrete release agent with a standard rubber scraper, e.g. a scraper edge.
3. Wipe the formlining, for example with a cloth.

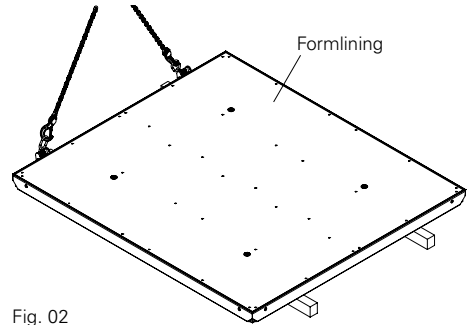


Fig. 02

Storage



- Storage class: 10 – according to TRGS 510.
- Storage period: 36 months.
- Storage temperature: > 0 °C.

Keep the container tightly closed and store in a cool, well-ventilated place.

Protect the container against:

- Frost
- Heat
- Direct sunlight

Transportation



This is **not** a hazardous material as defined in the transport regulations for agriculture (ADR), maritime (IMDG) and air transport (ICAO).

See also the safety data sheet.

During relocation procedures involving the crane, ensure that the container is picked up and set down in a way that prevents it from accidentally falling over, falling apart, sliding, falling down or rolling away.

Disposal



Water hazard class: WHC 1 – slightly hazardous to water.

Statutory provision – Ordinance on Facilities for Handling Substances Hazardous to Water (AwSV)

Concrete release agent must **not** be discharged into:

- the sewer system
- bodies of water
- the substrate or the soil.

For further information on disposal, see the safety data sheet.

Article no.	Weight in kg
031440	0.86
031455	0.86

PERI Bio-Clean
PERI Bio-Clean, 20 l
PERI Bio-Clean, 208 l

Readily biodegradable concrete release agent on a semi-synthetic basis. Can be used on formwork and equipment.
Water Hazard Class: WHC 1.

Note
Follow the instructions for use!

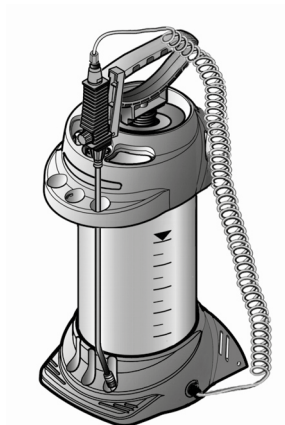


104890	4.700
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Release agent pressure sprayer
For spraying formlining surfaces evenly with PERI Clean, PERI Bio-Clean or PERI Plasto-Clean.

Complete with
1 x 117019 flat spray nozzle
1 x 117017 spiral hose 2.5 m
1 x 117015 shut-off valve
1 x 031526 sealing kit
1 x 117016 air pump

Note
Follow the instructions for use!



**The optimal
System for every
Project and every
Requirement**



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



**System-Independent
Accessories**



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