

PERI Clean

Concrete release agent

Translation of the Original Instructions for Use – Issue 02/2018

(UK product version)



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Key

Pictogram | Definition



Danger / Warning / Caution



Note



To be complied with



Tip



Safety gloves



Safety glasses



Protective clothing



Protective mask

Dimension specifications

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 are featured at the beginning of the section or ahead of the instructions, and are highlighted as follows:



DANGER

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



WARNING

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



CAUTION

This sign indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



INFORMATION

This sign indicates warning of situations whereby failure to observe the information can result in material damage.

Set-up of the safety instructions



SIGNAL WORD

Type and source of the danger!
Consequences of non-compliance.
⇒ Avoidance measures.

Safety instructions

General

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

Without exception, all current safety regulations and guidelines valid in those countries where our products are used and inspected must be observed; see also the Safety Data Sheet in the appendix.

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 can only assign those persons to independently use the concrete release agent who are actually familiar with the task!

The PERI 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 glasses



Protective clothing



Protective mask

For more specific information on the PPE, see the Safety Data Sheet, Section 8, in the appendix.

Safety instructions

Product-specific



DANGER

May be fatal if swallowed and if it enters the respiratory tract.

Therefore:

- do not inhale any release agent odour nor
- eat, drink, smoke or sniff the substance.

If swallowed or inhaled, immediately call the local poison control centre or doctor.

Do NOT induce vomiting.

⇒ Always wear a protective mask when working with the release agent.

For more information on the

- dangers, see the Safety Data Sheet, Section 2, in the appendix.
- First-aid measures: see the Safety Data Sheet, Section 4, in the appendix.

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.

Fire-fighting measures



DANGER

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

Do not inhale explosion or combustion gases.

⇒ Wear an ambient condition-independent respirator.

For more information on fire fighting, see the Safety Data Sheet, Section 5, in the appendix.

Intended use

PERI products have been designed for exclusive use in the industrial and commercial sectors by suitably trained personnel only!

PERI Clean is used as a concrete release agent.

PERI Clean is suitable for use on

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

Instructions on use

The use in a way not intended or deviating from the intended use according to the Instructions for Use represents a misapplication with a potential safety risk.

Changes to PERI components are not permitted.

Only PERI original parts may be used. The use of other products and spare parts represents a misapplication with associated safety risks.

Before being used for the first time, spray the side surfaces and the frame side of the formwork panels with a concrete release agent.

Formlining is sprayed immediately after striking. PERI Clean prevents the adhesion of concrete to the forming surface and thereby reduces cleaning requirements.

If used correctly, any subsequent processing of the concrete surfaces through plastering, wallpaper, paint and ceramic is not adversely affected.

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

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

Possible thickening at temperatures below 0 °C are reversible.

Additional technical documentation

- Instructions for Use:
 - PERI Bio-Clean
 - PERI Plasto-Clean
 - Release agent pressure sprayer

Target groups

Contractors

These Instructions for Use are intended for contractors who either

- assemble, modify and dismantle PERI products, or
- use them, e.g. for concreting, or
- who have them 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 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 has a reliable understanding of safety-related issues and can correctly carry out inspections. Depending on the complexity of the test 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 persons

PERI products may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. For the work to be carried out, the qualified persons must have received instructions** covering at least the following points:

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

** Instructions are given by the contractor himself or a competent person selected by him.

Apply using a release agent pressure sprayer



DANGER

May be fatal if swallowed and if it enters the respiratory tract.

If swallowed, immediately call the local poison control centre or doctor.

Do NOT induce vomiting.

⇒ Only work with PPE.



INFORMATION

Guide value for application quantity depending on the type of formlining: 20 g/m². Used in excess, this can lead to spotting, powdering and sanding of the concrete surface.



- When using a release agent pressure sprayer, the PERI Clean concrete release agent may only be used outside, e.g. on the construction site.
- Wear personal protective equipment.
The PPE consists of:
 - safety glasses
 - safety gloves
 - protective clothing
 - protective mask
- Carefully open the container.
- Working pressure of the release agent pressure sprayer: approx. 3 bar.
- For instructions on how to use the release agent pressure sprayer, see the Instructions for Use supplied by the manufacturer.
- PERI Clean concrete release agent can also be applied by hand when used outside. We would advise against doing this because uniform distribution is very difficult.



To ensure the release agent is evenly distributed over the formlining, we recommend applying the release agent to a horizontally-positioned formwork panel. (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. With a standard rubber scraper, e.g. pull-off edge, remove any surplus concrete release agent.
3. Wipe the formlining, e.g. with a cloth.

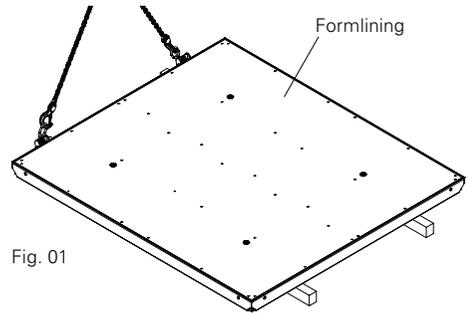


Fig. 01

Application by hand

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

- brush
- roller
- cloth



DANGER

May be fatal if swallowed and if it enters the respiratory tract.

If swallowed, immediately call the local poison control centre or doctor.

Do NOT induce vomiting.

⇒ Only work with PPE.



INFORMATION

Guide value for application quantity depending on the type of formlining: 20 g/m².
Used in excess, this can lead to spotting, powdering and sanding of the concrete surface.



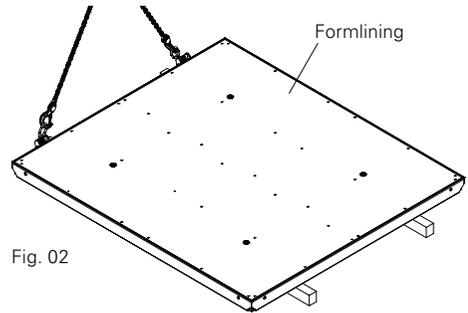
- When used inside, e.g. in closed rooms or halls, PERI Bio Clean concrete release agent may only be applied by hand – not using the release agent pressure sprayer.
- Wear personal protective equipment.
The PPE consists of:
 - safety glasses
 - safety gloves
 - protective clothing
 - protective mask



To ensure the release agent is evenly distributed over the formlining, we recommend applying the release agent to a horizontally-positioned formwork panel. (Fig. 02)

Application

1. Apply the concrete release agent thinly and evenly using a brush, roller or cloth.
2. With a standard rubber scraper, e.g. pull-off edge, remove any surplus concrete release agent.
3. Wipe the formlining, e.g. with a cloth.



Storage



- Storage class: 10 – according to TRGS 510.
- Storage period: 36 months.
- Storage temperature: 0 °C to 40 °C.

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

Protect container against:

- frost
- heat
- direct sunlight

Transportation



It 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, Section 14, in the appendix.

During the moving procedure with the crane, ensure that containers are picked up and set down so that any unintentional falling over, falling apart, sliding, falling to the ground or rolling is avoided.

Disposal



- Water hazard class: WHC 1 – slightly hazardous to water.
- Status: mixing rule in accordance with VwVwS* Appendix 4, No. 3.

Concrete release agent must not be discharged into:

- the sewer system,
- bodies of water,
- underground / soil.

For more information on the correct disposal, see Safety Data Sheet, Section 13, in the appendix.

* VwVwS = (German) Regulation on Substances Hazardous to Water

Item no.	Weight kg
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201147	23.25
201148	195.00

PERI Clean
PERI Clean, 25L
PERI Clean, 205L

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

Note

Follow Instructions for Use!



Item no.	Weight kg
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201008	4.44
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Release agent pressure sprayer

For evenly spraying formlining surfaces with PERI Clean, PERI Bio-Clean or PERI Plasto-Clean.





Appendix

SAFETY DATA SHEET PERICLEAN

Page: 1

Compilation date: 09/06/2015

Revision date: 18/03/2015

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: PERICLEAN

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Company name: PERI Ltd
Market Harborough Road
Clifton Upon Dunsmore
Rugby
Warwickshire
CV23 0AN
UK
Tel: (01788)861600
Fax: (01788)861610
Email: info@peri.ltd.uk

1.4. Emergency telephone number

Emergency tel: (01788) 861600

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Asp. Tox. 1: H304; -: EUH066

Most important adverse effects: May be fatal if swallowed and enters airways. Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Label elements:

Hazard statements: H304: May be fatal if swallowed and enters airways.

EUH066: Repeated exposure may cause skin dryness or cracking.

Hazard pictograms: GHS08: Health hazard



Signal words: Danger

[cont...]

SAFETY DATA SHEET

PERICLEAN

Page: 2

Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/first aid.
P331: Do NOT induce vomiting.
P405: Store locked up.
P501: Dispose of contents/container to to authorised waste disposal site.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC

EINECS	CAS	PBT / WEL	CLP Classification	Percent
265-155-0	64742-52-5	-	Asp. Tox. 1: H304	>70%

HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS - REACH registered number(s): 01-2119456620-43

926-141-6	-	-	Asp. Tox. 1: H304; -: EUH066	5-10%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Do not induce vomiting. Eye bathing equipment should be available on the premises.

[cont...]

SAFETY DATA SHEET

PERICLEAN

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Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Section 8: Exposure controls/personal protection

8.1. Control parameters

[cont...]

SAFETY DATA SHEET

PERICLEAN

Page: 4

Hazardous ingredients:

HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1200mg/m3	-	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not required.

Hand protection: Gloves (oil-resistant).

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow

Odour: Characteristic odour

Evaporation rate: Negligible

Oxidising: Not applicable.

Solubility in water: Insoluble

Also soluble in: Most organic solvents.

Viscosity: Non-viscous

Kinematic viscosity: 8.0

Viscosity test method: Kinematic viscosity in 10-6 m2/s at 40°C (ISO 3104/3105)

Boiling point/range°C: >150

Melting point/range°C: No data available.

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: >65

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: >200

Vapour pressure: No data available.

Relative density: 0.875

pH: Not applicable.

VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

[cont...]

SAFETY DATA SHEET

DICHEM FORMEASE CRA1

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10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS

DERMAL	RBT	LD50	>5000	mg/kg
ORAL	RAT	LD50	>5000	mg/kg
VAPOURS	RAT	4H LC50	>5000	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Aspiration hazard	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Absorption through the lungs can occur causing symptoms similar to those of ingestion.

Section 12: Ecological information

[cont...]

SAFETY DATA SHEET

PERICLEAN

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12.1. Toxicity

Hazardous ingredients:

HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS

ALGAE	72H IC50	20	mg/l
Daphnia magna	48H EC50	>250	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	>1000	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Insoluble in water. Floats on water. Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

[cont...]

SAFETY DATA SHEET

PERICLEAN

Page: 7

Phrases used in s.2 and s.3: EUH066: Repeated exposure may cause skin dryness or cracking.
H304: May be fatal if swallowed and enters airways.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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



Wall Formwork



Column Formwork



Slab Formwork



Climbing System



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



**System-Independent
Accessories**



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