



WADIT®

Non-toxic hot cast interlock sealant impervious to weather

Description

WADIT® is a globally proven sheet piling interlock sealant that has been used with all types of hot rolled and cold formed sheet piling interlocks in almost every environment (tropical to arctic) possible. If your sheet piling project involves cofferdams, dewatering, cutoff walls for site remediation, or any application where water leakage through the wall presents a problem, WADIT® is the solution. Tests have demonstrated that leakage through sheet pile walls is reduced up to 95% when interlock sealants are used, and sealed joint sheet pile cutoff walls are anywhere from 100 to 10,000 times more effective as groundwater flow barriers (sealed walls typically exhibit hydraulic conductivity in the 10⁷ to 10¹⁰ cm/sec range) than unsealed interlock walls.

WADIT® is the smart choice sealant from a cost and convenience standpoint.

Base material:	Natural, sustainable raw materials
Colour:	Olive-black
Form:	Solid
Container:	Melting 25 kg sacks
Melting temperature:	130 to 170°C
Melting device:	Casting compound cooker Ideal: Thermal batch cooker
Soluble in:	Organic solvents such as xylene, benzene and bio diesel
Density at 20°C:	0.994 g (cm ³)

Safety precautions

Respiratory passages:	None required
Hand protection:	Rubber gloves
Eye protection:	Goggles
Body protection:	Closed clothing

Applications

- Temporary sheet pile wall constructions
- Permanent sheet pile wall constructions
- Building trenches in soil with a high ground water level
- Casting the sheet pile wall interlock to prevent the ingress of soil components and the seizing of the piles during the driving process that this involves
- Sheet pile wall constructions in soil types with ground water and a low content of fine particles (gravel-type soil) and with unsuitable particle size distribution
- Reduction of interlock friction
- Encapsulation of contaminated soil areas
- Dam renovation work
- Sealing river banks
- Delimitation of underground water masses in water protection areas
- Sealing work on concrete and steel parts

Benefits

WADIT® has several advantages:

- **Once installed it is impervious to weather**

Once WADIT® is in the interlock it doesn't matter if it rains or snows; the performance of WADIT® will not be affected by weather.

- **WADIT® can be transported and stored without restrictions**

Furthermore you can drive the piling as soon as 5 minutes after installing or let it sit in your yard or at the job site for months before driving.

- **Can be delivered already installed in the sheet piling interlocks**

The mill or distributor where you buy your sheet piling can also deliver the sheet piling with WADIT® already installed. This may not be available with all types of sheet piling in all areas.

- **Environmentally friendly:
No harmful effects to the environment**

WADIT® is non-toxic and is made from sustainable natural raw materials. "WADIT® sealant can be used without any restrictions in sheet pile wall interlocks in ground and surface water areas ... no fears of harmful effects if it is used in the area of drinking water extraction systems" (quote from the Germany equivalent of the EPA).

- **Tested to withstand 3.5 bars of pressure**

WADIT® has been tested to withstand 3.5 bars (50 psi) of differential pressure. This means it will remain in place and functional with a 35 m head of water against it!

- **Unique durable bond**

WADIT® creates a secure bond even in extreme conditions such as strong water, ice or earth pressure; movements of the sheet pile wall; or displacement of the piles during transport, etc., in the interlock chamber. Even in daytime temperatures of 50°C, the material will remain stable in the interlock.

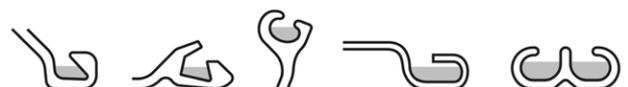
- **Optimal flexibility**

Conventional materials become as hard as glass in temperatures of just 10°C. WADIT®, on the other hand, remains extremely flexible even in ground water (5° to 7°C throughout the year). This means that no sealant can break out of the interlock when the sheet pile walls are inserted, thus resulting in leaks.

- **Memory effect = material rebound after movement**

This unique effect of WADIT® (at ground water temperature) guarantees an excellent seal even in the event of torsion and other movement in the sheet pile wall interlock.

Interlocks with a WADIT® sealing



Application

Place the entire bag of WADIT® (including the plastic bag it comes in) in an indirect oilfired thermostatic controlled cooker. Please be careful not to overheat! When installing WADIT®, the interlocks must be clean, dry and free of "rolling skin". If the outside temperature is lower than 5°C, then add WADIT® FLEX as described below. WADIT® FLEX should be added to WADIT® after WADIT® is already in the cooker. WADIT® FLEX is also non-toxic and will increase the overall volume of material available for sealing.

Recommendations

For used sheet pile, the existing residue in the interlock must be melted briefly using a bunsen burner. We also suggest that if the temperature is less than 0°C, then the interlocks should be slightly warmed, with a bunsen burner. Do not apply WADIT® to a damp interlock!

Important information!

Do not overheat the casting compound in any circumstances since this may adversely affect its quality. The temperature must be between a minimum of 130°C and a maximum of 170°C. Regular temperature control using a thermometer is advisable. During the heating phase the casting compound is to be stirred at regular intervals. If the casting compound is overheated, it should be discarded and not used.

Quantity instructions for WADIT®

According to the interlock system used between 250 g and 450 g of WADIT® per meter of sheet pile wall interlock. The quantity may be higher for used piles.

Quantity instructions for WADIT® FLEX

The external temperature at the time of the piling operation is the main criterion for the addition of WADIT® FLEX.

External temperature:

Over 5°C:	No addition required
Down to -5°C:	2 litres per 25 kg of WADIT®
Below -5°C:	5 litres per 25 kg of WADIT®

Container size for WADIT® FLEX: 20 litres canister

Cleaning tools and equipment

WADIT® is soluble in organic solvents such as xylene, benzene and diesel. Rape seed oil and bio diesel are particularly environmentally friendly solvents for this purpose.

Treatment of residue

Small quantities WADIT® that have been dissolved using environment-friendly methods can be disposed of in building waste landfill sites. We recommend that it be bound with lime or cement.

Storage

WADIT® can be stored for an unlimited period of time. Avoid direct UV radiation. Recommended temperature below 30°C.

What to do in the event of accidents

If WADIT® causes skin burns as a result of improper handling, the affected area is to be cooled for several minutes using cold water. Do not pull off material affixed to the skin or attempt to remove it with solvents. Seek medical attention.

Report (safety certificate)

Investigating body:

Bavaria State Trade Department (LGA)
Institute for Environmental Geology
and Contaminated Land
Tyllstr. 2, 90431 Nuremberg, Germany
Phone: +49-911 / 655-5699
www.LGA.de



Material: WADIT® sheet pile wall sealant
Date of investigation: 1997, 1999, 2000

Result (extract)

"The reports by the LGA come to the conclusion that WADIT® sealant can be used without any restrictions in sheet pile wall interlocks in ground and surface water areas. If used correctly, therefore, there are no fears of harmful effects if it is used in the area of drinking water extraction systems."

The detailed investigation report can be requested from us at any time.

More information is available on the Internet at www.wadit.com