

# Ceresit

Technical Data Sheet  
**CERESIT TS22**  
May 2014

## PRODUCT TYPE

1K polyurethane foam with universal applicator system

## PRODUCT FEATURES

One-component, moisture cure semi-rigid polyurethane foam featuring innovative combined straw- and gun-adaptor, which allows the user to choose the preferred application method to use, depending on the need. Product can be applied up to -10°C temperature. Application convenience is ensured both with a gun and the delivered applicator.

Straw-applicator offers opportunity to use the product already familiar to the user also for applications, where straw-applicator is more beneficial and effective. In comparison with traditional straw foams the 2x2 foam ensures improved foam structure and higher yield output due to narrower straw applicator. Gun-applicator offers precise and ergonomic application. Please use the applicator tested and approved by producer of the can for best working experience.

The foam is self-expanding and during the curing process expands about 2 to 2.5 times. Has excellent adhesion on most building materials like wood, concrete, stone, metal etc. Yield of the cured foam largely depends on working conditions – temperature, air humidity, available space for expanding, etc. At minus temperatures the expansion of foam is lower and curing time longer.

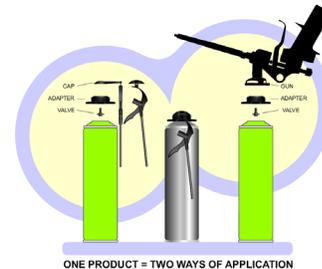
Product does not contain CFC propellants.

## PACKAGING

750/1000 ml

## MAIN APPLICATIONS

- Insulating window and door frames
- Filling of cavities
- Sealing of cavities around pipes
- Bonding wood, PVC, etc.
- Application in cold conditions



**ATTENTION!** Cured PU foam must be protected from UV radiation by painting or applying a top layer of sealant, plaster, mortar, or other type of covering. Adhesion of the product is weak on polyethylene, Teflon® and other plastic surfaces.

## APPLICATION INSTRUCTIONS

### Substrate preparation

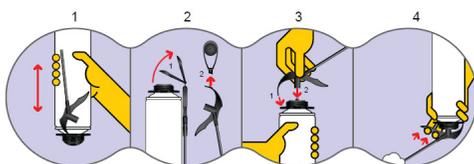
Substrates must be stable, clean and free of substances likely to impair adhesion. To ensure full and even curing of the foam, moisturize mineral, porous substrates (brickwork, concrete, limestone) with water spray before application. Mask off adjacent areas with foil. The surfaces can be moist, but not frosted or iced.

### Application temperature

- Working temperature** - from -10°C to +25°C.
- Can temperature** – from +5 °C to +25 °C. Can has preferably to be stored for at least 12 hours in room temperature.

### Application with straw

- Shake the can vigorously before use (15 - 20 times).
- Attach the fixing end of the foaming straw adapter tightly into the slot provided on the gun-adaptor by turning the straw 90 ° and pushing the connecting tube-detail firmly onto the valve, avoiding undesirable opening of the valve.
- A slight click will indicate that the straw tube-connection is properly attached.
- Dosage of the product can be adjusted by pressing the trigger.
- Since the foam is expanding 2 to 2.5 times until cured, some free space for expanding should be left. If there are longer pauses than 5 minutes during working, the nozzle and valve must be cleaned.
- For cleaning, the straw can be clicked onto the PU Foam cleaner valve. Important is to clean thoroughly the connecting parts – valve and straw tube-detail to avoid undesirable valve opening during repeated application.



APPLICATION WITH STRAW

## PROPERTIES

<b>Foam density</b> HENK-PU-10.3	ca 25 kg/m <sup>3</sup>
<b>Tack free time</b> TM 1014:2013	6 - 10 min
<b>Cutting time</b> TM 1005:2013	ca 50 min
<b>Curing pressure</b> TM 1009:2013	max 25 kPa
<b>Post expansion</b> HENK-PU-14.1	max 150 % (straw) max 70 % (gun)
<b>Dimensional stability</b> TM 1004:2013	+/- 10 % (straw) +/- 5 % (gun)
<b>Maximal joint width</b> TM 1006:2013	3 cm Testing conditions: -10 °C
<b>Shear strength</b> TM 1012:2013	ca 40 kPa
<b>Compression strength 10%</b> TM 1011:2013	n.a.
<b>Fire class</b> EN 13501	F
<b>Water absorption 24h</b> EN 1609	max 1 %
<b>Water absorption 28 day</b> EN 12087	max 10 %
<b>Sound damping</b> EN ISO 10140	60 dB
<b>Yield per can</b> TM 1003:2013   TM 1007:2013	750/1000 ml: max 3 L

- Temperature resistance of cured foam:**  
-40 °C...+90 °C, short term peaks up to +120 °C.
- Thermal conductivity of cured foam:**  
0,037...0,40 W/mK

All measurements on norm. climate (+23 ± 2 °C | RH 50 ± 5%) unless indicated otherwise.

For **safety precautions and disposal instructions**, see the corresponding product Material Safety Data Sheet.

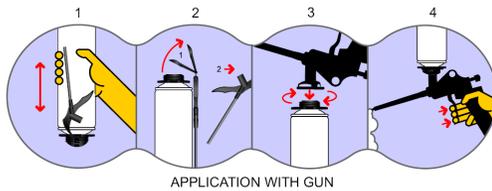
## SHELF-LIFE | STORAGE AND HANDLING

**Best before 15 months.** For longest shelf life avoid storage above +25°C and below +5°C (up to – 20 °C for a short period). Always store can with the valve directed upwards. Transportation of odd cans by passenger car: leave the container wrapped in a cloth in the trunk, never in the passengers' compartment.

Check separate **Storage and Handling Instructions**.

### Application with gun

- Shake the can vigorously before use (15 - 20 times).
- Screw the can tightly onto the gun. When working with the gun always keep the can upside down.
- The outflow rate of the foam is controlled by pressing the gun trigger.
- Dispense the foam sparingly to avoid excess overflows.
- Repeat shaking regularly during application.
- It is not recommendable to remove the can before it is totally empty.
- When replacing the can shake the new can vigorously.
- Unscrew the empty can and replace it immediately to ensure that there is no air left in the gun.
- If you do not want to replace the can, remove the foam from the gun using PU foam cleaner. Hardened foam can only be removed mechanically.



### Limitations

Limitations to joint maximal width exist in regard of ambient temperature and humidity levels.

- In dry conditions (during winter time, in rooms with central heating etc.), in order to get best foam structure and foam properties it is recommendable to fill gaps and joints in several layers by the application of smaller foam strings (up to 3-4 cm thickness) and slightly moisturizing between every layer.
- At very dry conditions, the foam may be brittle directly after the hardening. This brittleness is a temporary effect and disappears after a while or by warming up. Once the foam is flexible, it does not get brittle again even at cold temperatures.



Henkel uses test methods approved by FEICA designed to deliver transparent and reproducible test results, ensuring customers have an accurate representation of product performance. FEICA OCF test methods are available at: <http://www.feica.com/our-industry/pu-foam-technology-ocf>. FEICA is a multinational association representing the European adhesive and sealant industry, including one component foam manufacturers. Further information at: [www.feica.eu](http://www.feica.eu).