

# ROCK BREAKING CHEMICAL



Introducing NexPand, your trusted expansive mortar, also referred to as Rock Breaking Chemical. Available in powder form, simply mix with water to initiate gradual expansion, effectively cracking and breaking rock, concrete, reinforced concrete, slabs, beams, and more. This environmentally friendly solution ensures no vibration, noise, toxic gases, fly rock, or residue, setting a new standard for safety and environmental responsibility in demolition and rock breaking.

### WHO CAN USE NEXPAND?

Anyone can use it, in any situation, because NexPand is perfectly safe, soundless, and non-hazardous and no permits is required.

## APPLICATIONS - WHERE CAN NEXPAND BE USED?

- · Quarrying and dimension stone cutting.
- Breaking boulders and in-situ rock.
- Rock breaking during trenching and foundation excavation
- Rock breaking in underground mining and shaft development.
- Breaking reinforced and non-reinforced concrete during demolition.
- Rock breaking in sensitive or densely populated environments.

# **NEXPAND PRODUCT RANGE**

It is important to select the correct type of NexPand product before use. The reaction time of NexPand is determined by ambient temperature, as well as the temperature of the object to be demolished. NexPand is packaged in 20 kg cartons containing 4 individual 5 kg bags.

TYPE 1 temperature range / -05° to 10° C TYPE 2 temperature range / 10° to 25° C TYPE 3 temperature range / 25° to 40° C

# DID YOU KNOW?

NexPand produces pressures from 40 and 100 MPa (4,000 to 10,000 MT/m2. The pressure required to break rock and concrete (tensile strength) varies from 3 to 10 MPa, NexPand will break any rock and concrete with ease.

# **HOW TO USE NEXPAND?**







NexPand + Water =

- 1. Measure the dimensions of the boulder or rock. 2. Drill holes to a depth that is at least 90% of the rock's depth.
- 3. Space the drill holes approximately 250mm to 300mm apart.
- 4. Calculate the necessary amount of NexPand for the job.
- 5. Ensure an ample supply of clean, cold water is available before mixing.
- 6. Combine one box of Nexpand powder with 6 litres of water.
- 7. Check the mixture's consistency to ensure thorough blending.
- 8. Pour the prepared NexPand mixture into the drilled holes, filling them up to about 30mm from the top.
- 9. Allow the mortar to set undisturbed for a minimum of 24 hours to achieve optimal results.
- 10. Avoid blocking holes with solid materials; use a waterproof sheet only in case of rain.
- 11. The reaction time varies depending on weather conditions, typically ranging from 2 to 24 hours.

# **ADVANTAGES OF NEXPAND**

- Production can be significantly increased making NexPand cost effective.
- Stopping width can be easily controlled.
- NexPand has a shelf-life of 1 year.
- No permits is required anyone can use NexPand.
- Environmentally friendly solution no vibration, noise, toxic gases, fly rock, or residue.
- NexPand can be used adjacent to existing structures. buildings, homes without damage to property.



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Harlen Supplies (Pty) Ltd offers an extensive selection of products and solutions for your rock breaking and drilling needs. Our range includes handheld rock drills, drill steel, drill bits, Top Hammer rods, bits and couplings, as well as DTH rods, bits and hammers.