

EasyGel Protect Nuclear

Capture of both fine particles and asbestos during drilling operations



EGPN solution



Drilling with the EGPN solution



Solid bloc

Scope

EasyGel Protect Nuclear (EGPN):

- Solution composed of self-adhesive bags containing: a stable hydrous gel (equivalent to that used for ultrasound scans), a cement
- Drills adapted to facilitate the capture of particles by the gel

EGPN is an adaptation of the EGP® bags used in the construction industry to make the waste produced acceptable on storage facilities

Working principle:

- The bags are glued to the surface to be drilled
- The drilling is done through the gel bag via a collector
- Particles are trapped by both the gel during drilling and the removal of the drill bit
- The gel bag is sealed by a plug placed on the collector
- Cement is introduced from an adjacent bag
- Cement interacts with the gel and creates a solid block without the need for water

Solution approved by the ministerial commission CEVALIA which evaluates innovations in the asbestos' world regarding individual and collective protection

Advantages

- **SIMPLE**
Quick and easy to install
- **PERFORMANCE**
No need for vacuuming at the end of the work
- **WASTE**
Volume in low level / intermediate level waste packages: increase from 10 to 20%
- **SAFETY**
Increased safety for workers
Particles retained at the source
- **CSR**
Protection of the working environment
No generation of waste without a channel

Key data

Characteristics:

- Pre-dosed product and ready to use
- Transparent and unarmful gel
- 150 µm thick LDPE film, FME compatible

Dimensions:

- Size: 135 x 500 mm
- Gel volume: ~170 ml
- Bag weight: ~500 g (with cement)
- Collector diameter: 68 mm

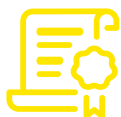
Drill bit:

- $\varnothing < 14$ mm
- 3 flute drill bit to speed up dust evacuation

An alternative solution to the extraction of fine or ultrafine particles during drilling work on materials that may contain asbestos



Drilling sequence with the EGPN solution



The solution is protected by two patent applications filed for both France and internationally.

References

- **Orano DS - la Hague**

Used in a controlled area of the MAU workshop (CEA Marcoule, France). The operation consisted of installing anchor bolts to fix a rigid intervention air-lock.

The use of these bags allowed to avoid the suction of particles and significantly reduce the amount of waste generated during the operation.



Drill adapted to capture particles by the gel

The EGPN is the result of a collaboration between BCL Invent and Orano.



Contact us to discover EasyGel Protect Nuclear

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