Closed Cell Sponge Frequently Asked Questions

Closed Cell Foam Benefits:

- Cleanable, non-porous surface
- Artifact free material
- 100% radiolucent!
- Extreme durability
- Lightweight and comfortable, soft surface
- Anti-Microbial and Anti-Fungal material
- Less expensive than most coated or covered options
- Will not absorb liquids even if torn or damaged!

Frequently Asked Questions:

1) My facility requires coated sponges. Do closed cell sponges have a coating?

Closed cell sponges don't need a protective coating! Closed cell or "cross-link" foam is non-porous, meaning it will not absorb liquid. Coated sponges need a "coating" because the inside or "core" is a standard, porous sponge.

2) Will closed cell sponges show artifacts under x-ray?

No, they won't! Extensive testing has shown that closed cell sponges are completely radiolucent and entirely artifact free! Since closed cell foam does not require a chemical coating (see question 1), the edges will not show as an artifact under x-ray like a traditional coated or vinyl covered sponge would!

3) Can I clean and sanitize closed cell sponges in-between use?

Yes, you can! You can clean closed cell foam just like any coated or covered sponge. Any standard, non-bleach-based cleaning solution your facility currently uses will work! Techno-Aide has tested several of the most common cleaning solutions to ensure closed cell foam will not degrade over time. To ensure long lasting performance, always follow manufacturer guidelines with any cleaning solution. If you have a question about a specific cleaner, simply contact Customer Service for more information.

4) Why do some closed cell sponges look used or scuffed?

The manufacturing process for closed cell foam is very different than a traditional coated or covered sponge. Coating is typically a chemical solution sprayed over a piece of foam (see question 1), and covered sponges typically have nylon or vinyl covers sewn over them. These processes create an even and smooth surface finish. Closed cell sponges do not require these steps to be non-porous, and without a coating or cover, the outer layer can show smudges, nicks, and other surface marks from the raw material. Rest assured, we do not sell used sponges and your closed cell sponge will always be brand new! These surface variations do not impact the functionality of the sponge.

5) Why would I want closed cell instead of a coated or covered sponge?

Closed cell sponges offer ALL of the benefits of a coated sponge and none of the drawbacks! Anytime you apply a coating or cover to a sponge, the chance of artifacts increases significantly. It is important that technologists understand the difference between shadowing and artifacts.

Shadowing happens when an item shows under imaging but does not actually interfere or disrupt the primary field of view (generally the body part being imaged). Artifacts however are any disruption in the primary field of view during imaging that can lead to a misdiagnosis or harm. Artifacts can show for any number of reasons including improper machine maintenance or calibration, imaging table or furniture issues, and even improper kV settings. However, the most common cause of an artifact is standard positioning aids within the field of view.

For example, say you were imaging a patient's hand that was damaged by a car door. If you placed the patient's hand on the edge of a rectangular, draping their hand over the edge of the sponge, you will more than likely see a line from the outer edge of the coated sponge as a line cutting through the image of the hand. This line can impede the staff's ability to determine what damage occurred. This would generally be considered an artifact and an unacceptable image. If you used a hand sponge to achieve the same image and instead placed the patient's hand along the properly designed spaces, the chance of seeing an artifact is minimal. Even if the outside border of the sponge created a line through the patient's forearm, the primary field of view (the hand) would not be disrupted, and this would typically be considered an acceptable image.

Closed cell sponges do not create artifacts, so you never have to worry about an unacceptable image!Closed cell sponges are also easy and safe to clean, highly durable, and sometimes less than half the price of a comparable coated or vinyl covered option! Closed cell sponges offer nearly every benefit of a coated or vinyl sponge with none of the traditional drawbacks and concerns.

6) So why do people still use coated sponges?

Until recently, closed cell (cross-link) foam manufacturing was a very specialized and expensive process. Techno-Aide has helped innovate new and more efficient ways of manufacturing. This allows us to offer more affordable closed cell options faster and more efficient than ever before! Techno-Aide is dedicated to growing our closed cell product line and helping meet the needs of today's imaging world.