

TekPad® Pressure Relieving Gel

Cushioning that suits its **shape** to changing circumstances.



Existing Use: Comfort for extreme sports.



Existing Use: Comfort for your workout.

HOW DOES TekPad® WORK?

Jab it and your finger will bounce off, but gently press and it will slowly sink in, conforming to the size and shape of any object. Common cushioning materials don't have the same ability to deform and will always return to their original shape after use. TekPad® cushions are used in the medical, travel and performance sports industries for maximum comfort, support and impact absorption. Imagine a kayak seat, a car seat or an airplane seat with a TekPad® cushion that automatically conforms to each user ensuring maximum comfort for the legs and back and reducing numbness or tingling after prolonged sitting.



Existing Use: Comfort for long trips.

TekPad® ULTRA-LITE™

TekPad®UL™ is an ultra-lightweight, temperature stable and non-toxic composite used in applications where superior cushioning, positioning, comfort and pressure relief is required. A cushion, pad or mattress made from TekPad®UL™ provides all the characteristics of non-powered fluidized therapy, offering maximum patient immersion, interface and contouring without electrical or battery operated mechanisms

NO MEMORY

TekPad®UL™ is engineered with NO memory. Zero memory allows TekPad® to maintain its original shape or the shape acquired from external pressure points such as bony prominences. This characteristic helps to reduce surface shear through patient immersion.

FLUID MEDIA

TekPad®UL™ is a fluid media while "foams" are resilient materials. Fluids displace while "foams" compress. Compression creates back pressure equal to the external force applied; hence, back pressure equals impeded circulation - equals tissue damage. TekPad®, because it is a fluid media, displaces or deforms resulting in lower, flatter, peak pressures hence "pressure relief" or "normal" blood flow. Normal blood flow results in lower incidents of tissue damage.

LIGHT WEIGHT

TekPad®UL™ composites are 55% to 75% lighter than equal volumes of water or plastic gels. Its light weight makes it an ideal material for mattresses providing significant volume without making them too heavy to maneuver.

TEMPERATURE STABLE

TekPad®UL™ is temperature stable, so it remains soft and easily conforms to shape at low temperatures. Because of its low specific gravity TekPad® exhibits all the characteristics associated with low thermal mass and does not retain high levels of ambient or body heat. Cushioning devices made with TekPad®UL™ can be used without concern for thermal discomfort, even after exposure to temperatures as low as -20°C or as high as 60°C.

TekPad®UL™ CAN BE ENGINEERED TO FIT SPECIFIC APPLICATIONS.

PHYSICAL AND CHEMICAL PROPERTIES OF TekPad®UL™:

Appearance:	White flowable compound
Odor:	No particular odor
PH:	8 – 10, depending on version
Relative Density:	0.18 – 0.45-5 H ₂ O = 1.0 depends on version
Stability:	Stable -20°C to 60°C.
Solubility in Water:	Insoluble

HOW DOES TekPad®UL™ COMPARE TO WATER AND VISCO AND GELS?

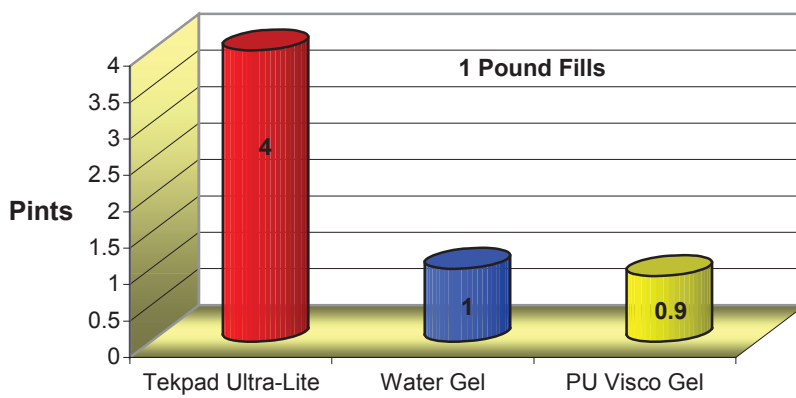
	TekPad® UL™	WATER GEL	VISCO GEL
LIGHTWEIGHT	YES	NO	NO
FREEZES	NO	YES	NO
EFFECT OF HEAT	NONE	FLOWS	SOFTENS
ABSORBS HEAT	NO	YES	YES
ABSORBS COLD	NO	YES	YES
BACTERIASTAT	NO	YES	NO
NEEDS BARRIER FILM	NO	YES	NO
ENGINEERED FLOW	YES	NO	YES

HOW LIGHT IS TekPad®UL™?

Compare TekPad® UL™ with the heavier water based and Visco elastic gels which are more than 4 times as heavy.

One pound of TekPad®UL™ fills 4 pint containers

Comparison of Volumes



One gallon of TekPad®UL™ weighs 2.08 pounds

Comparison of Weight

