# POWERED BY

# **HYPER**KEWL

#### Product #8529

TechNiche EVAPORATIVE COOLING

#### DOG COAT

### Powered by HyperKewl™Plus

- Secured at the chest and under the belly, this unique vest keeps your dog cool on hot days while it runs and plays
- Flexible shoulder panels allow the dog to move without restriction
- Provides 5-10 hours of cooling relief per soaking; extremely lightweight
- Comfortable, quilted nylon outer with HyperKewl<sup>™</sup> fabric inner. waterproof nylon liner, and black poly-cotton trim
- Colors: Blue, Silver
- Sizes: XS, S, M, L, XL, XXL (See sizing chart right for more details)











#### Product #8511

TechNiche EVAPORATIVE COOLING

#### DOG PAD

# Powered by HyperKewl™Plus

- Economical and effective
- Great way to cool down your pet on a hot day; can be used indoors or outside
- Provide 5-10 hours of cooling relief per soaking; extremely lightweight and durable
- Comfortable, quilted nylon outer with HyperKewl™ fabric inner, waterproof nylon liner, and black poly-cotton trim
- Colors: Blue, Silver
- Sizes: XS, S, M, L, XL, XXL (See sizing chart above for more details.)













# **EVAPORATIVE COOLING CANINE & EQUINE PRODUCTS**

#### Product #8510

TechNiche EVAPORATIVE COOLING

#### HORSE BLANKET

Powered by HyperKewl™

- Two chest straps and two under belly straps secure the blanket to the horse
- Flexible shoulder material allows the horse to move with minimal restriction
- Provide 4-6 hours of cooling relief per soaking; lightweight and durable
- Comfortable, quilted nylon outer with HyperKewl™ fabric inner, water repellent nylon liner, and black poly-cotton trim
- · Colors: Blue, Silver
- Sizes: S/M. L/XI







#### **EQUINE SIZING CHART**

COOLING HORSE BLANKET S/M: 14.1 - 15.3 Hands L/XL: 16 - 18 Hands

HORSE NECK COOLER Small: 29" mid neck diameter Medium: 33" mid neck diamete

COOLING HORSE LEG WRAF



#### Product #8520

TechNiche EVAPORATIVE COOLING

#### HORSE NECK COOLER

Powered by HyperKewl™

- Secured to your horse with hook and loop straps and an attachment to the horse's halter.
- Provides 5-10 hours of cooling relief per soaking
- Comfortable, quilted nylon outer with HyperKewl™ fabric inner, water repellent nylon liner, and black poly-cotton trim
- · Colors: Blue, Silver
- Sizes: S, M, L (See sizing chart above for details)









#### Product #8550

TechNiche EVAPORATIVE COOLING

#### HORSE LEG WRAPS

Powered by HyperKewl™

- Three hook & loop straps allow you to secure the cooling leg wraps without causing the animal undue stress.
- Provide 5-10 hours of cooling relief per soaking; lightweight and durable
- Comfortable, quilted nylon outer with HyperKewl<sup>™</sup> fabric inner, water repellent nylon liner, and black poly-cotton
- · Colors: Blue, Silver
- Sizes: One Size (See sizing chart above for details)
- Sold in pairs



















# **EVAPORATIVE COOLING Technology**

# How it Works

The KewlTowel™ is designed to keep you kewl and refreshed. An activated KewlTowel™ is wiped on exposed skin surfaces to provide a cool and refreshing boost of energy. The KewlTowel™ also allows users to wipe off the dirt and sweat which further refreshes users. This large towel promotes maximum cooling power and is an excellent tool for dealing with the summer heat. Whether you work outside, ride a motorcycle in hot weather, exercise in the summer heat or are exposed to any warm conditions, the KewlTowel™ is a greatway to stay cool and refreshed.







# How to **Activate**

To activate our KewlTowel™, simply submerge the towel in water for 1 minute, and gently squeeze out excess water. Wipe down your exposed skin and create a natural cooling effect. The KewlTowel™ will remain activated for hours and can be re-hydrated by following these simple steps.

Water is "released" through evaporation, energy is consumed, and a chill effect is created. This chill effect is easily transferred from the KewlTowel™ to your skin by wiping the activated towel on your skin surface. The KewlTowel™ can be activated over and over by simply submerging it in water. Beat the heat all summer long with our KewlTowel™ evaporative cooling system.

# **EVAPORATIVE COOLING TOWELS**

#### Product #6101

TechNiche EVAPORATIVE COOLING

#### **COOLING TOWEL**

Powered by KewlTowel™

- Made from highly absorbent PVA material with dimple
- Will remain hydrated for hours and is easily re-activated
- Lightweight, easy to activate, and durable
- Ideal for those working or recreating outside
- Size: 12" x 28"
- Colors: Blue
- Unit = 1 Towel (bulk quantities are available)





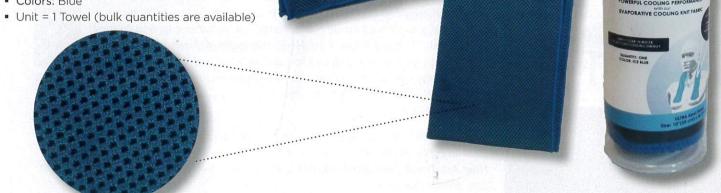
#### Product #6102

TechNiche EVAPORATIVE COOLING

# **ULTRA COOLING TOWEL**

Powered by KewlTowel™

- Made from 100% Polyester Knit Fabric
- Will remain hydrated for hours and is easily re-activated
- Lightweight, easy to activate, and durable
- Ideal for those working or recreating outside
- Colors: Blue



O TECHNIQUE





EVAPORATIVE

CTED 1



STED



STEP 3



STED 4





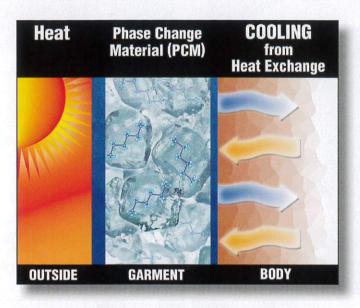
# PHASE CHANGE COOLING Technology

# How it Works

TechNiche products powered by CoolPax<sup>™</sup> are designed to provide targeted temperature cooling using advanced Phase Change Cooling Materials. These materials are activated by exposing them to any condition below their Phase Change Temperature. This means that Cool Pax<sup>™</sup> can be activated in freezers, fridges, ice water or any other situation where the temperature is below 58°F (14°C). This unique feature means that with the use of ice in a cooler, users can re-activate inserts by simply placing them in a cooler full of ice ... no need for electricity.

Compared to water, these Phase Change Materials freeze faster, stay frozen longer and are lighter in weight.

Each garment comes with a hang tag and care label that fully explain how best to use the product and care for the product.



# How to Activate

TechNiche Phase Change Cooling inserts are activated in ice water or the freezer. They will re-charge in any environment where the temperature is below 58°F (14°C). Simply place them in ice water or the freezer for 45 minutes to ensure that they are solid all the way through. Please note that Phase Change Material solidifies from the outside in, so they may look solid after 15 minutes but need the full 45 minutes to be solid all the way through.

TechNiche utilizes high purity alkane materials to achieve targeted temperature cooling. Our Phase Change Cooling Materials (PCM) are non-toxic, non-flammable and non-combustible. In our advanced manufacturing procedures, these PCM's are sealed inside high strength polyurethane to ensure they do not leak. These durable Cool Pax™ inserts are deployed in a variety of shapes and sizes to ensure personal comfort and achieve maximum cooling results. This personal cooling technology can be deployed in a variety of occupational, recreational and competitive settings.

Who Uses This Technology ... anyone who works or recreates in warm weather Best Conditions for Use ... any climate

How Are These Products Different ... maintain a fixed temperature within the vest and do not use water

# Phase Change Cooling Product Comparison

1)	Cooling	Materia
1)	COOMING	riateria

- 2) Plastic Encasement
- 3) Cooling Vest Style
- 4) Cool Pack Position Stabilizers
- 5) Vacu-Form & Multi-Shape Design
- 6) Standard Product Includes Insulated Cooler Bag
- 7) Cooling Pack Life Span
- 8) Warranty

H2O Cooling Packs	Other Phase Change Products	Cool Pax™ Phase Change Cooling Packs
Water	Low Grade Alkanes or Plant & Animal Fats	High Purity Alkanes
PVC	Standard Polyurethane	High Strength Polyurethane with UV Stabilizers
Basic Vest	Basic Pull Over	Multiple Styles Contoured Design
No	No	Yes
No	Yes	Yes
No	No	Yes
1+ Years	3+ Years	10+ Years
		1 Year

# **Technical Features**



Phase Change Cooling Technology



Can Be Worn Under Other Apparel



Cooling Duration 1 - 2 Hours



Cooling Duration 2 - 3 Hours



Unisex Product Design



Female Specific Product Design



Product is ANSI Class II Compliant



Fire Resistant Version Available



Cool Pax Stabilizer

# Key Product Benefits

- Specialized personal cooling solution
- Works effectively in all temperature environments (eg. high humidity)
- Targeted cooling for key heat zones, promotes comfort and enhances performance
- Provides targeted cooling comfort and heat stress prevention
- Lightweight, durable and reusable
- Phase Change Material (PCM) releases long-lasting, temperature-specific (58°F, 14°C), cooling relief
- Commonly used under hazardous material suits, military combat gear, mascot costumes and other apparel
- Additional PCM inserts are available for extended relief
- Can be activated in ice water, no electricity required
- Built-in Velcro stabilizers prevent sagging





# PHASE CHANGE COOLING

# PHASE CHANGE COOLING Technology

# How to Activate

Cool Pax™ Phase Change Cooling inserts are activated in ice water or the freezer. They will recharge in any environment where the temperature is below 58°F (14°C), Simply place them in ice water or a freezer for 45 minutes to ensure they are solid all the way through. Please note that Phase Change Material solidifies from the outside in, so they may look solid after 15 minutes but need the full 45 minutes to be solid all the way through.

Our targeted temperature Cool Pax™ inserts provide the user with a constant 58°F for 1-2 hours. Research shows this temperature is ideal for both performance athletes looking to get an athletic edge as well as individuals looking to lose weight.

Athletes are able to work out longer, harder and have better overall performance while staying cool and comfortable throughout their training. This specific temperature gradient maximizes the amount of heat that is pulled from the body to moderate core body temperature without causing a vasoconstriction response.

Users are also able to increase the amount of calories they burn by wearing the targeted temperature vest to stimulate brown adipose tissue. Harvard Medical School research shows when activated through cool temperatures this tissue has the ability to burn up to 500 calories a day. some powerful results.

Who Uses This Technology ... any athlete or person managing their weight Best Conditions for Use ... anywhere

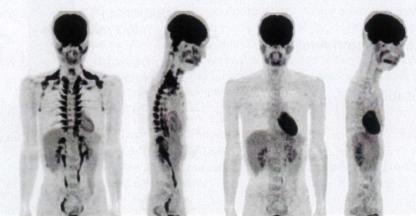
How Are These Products Different ... keep the user at a fixed 58°F (14°C) for 2-3hrs. No airflow or water needed.

# How it can Benefit You

Phase Change cooling technology for weight loss: our 58°F (14°C) Cooling Vest stimulates Brown Adipose Tissue (Fat) causing the consumption of calories. According to research done by Harvard Medical School, Cooling Vests are a safe and effective way to burn extra calories and lose weight.

Performance Enhancement ... most people's central organs, specifically the liver, kidneys, and intestines, rise above 101 degrees during exercise. When that happens, water and blood begin to leave your muscles and race to the skin in an attempt to cool you down. This depletes the muscles of oxygen and dehydrates them, causing fatigue. Yet while most athletes reach the 101 degree threshold after just 20 to 30 minutes of exercise, recent studies have shown that cooling beforehand can delay the process significantly.

Comfort: Cooling Vests help keep athletes (and regular people) cool and comfortable when they exercise. This enables us all to work out harder and longer, thus increasing the workout benefits.





# **Key Product Benefits**

# 3 important benefits when being exposed to 58°F (14°C) Cooling:

- 1) Stimulate Brown Fat = Burn Calories
- 2) Improve Athletic Performance = Keeps blood in the muscle
- 3) Cooling Comfort = work out in comfort

# **Academic Research Supporting These Claims**

#### Cooling the body for Weight Loss

- 58°F (14°C) Cooling Vests reliably activate brown fat (Harvard Medical School)
- Activated Brown Fat boosts the rate at which we burn calories by 20% (New England Journal of Medicine)
- Activated Brown Fat may burn an extra 500 calories/day (Harvard Medical School)
- Three ounces of brown fat can burn several hundred calories/day (ObesityInAmerica.org)
- A substantial loss of fat is induced by a combination of exposure to cold and exercise (American Physiological Society)
- Brown adipose tissue is responsible for the successful defense of body temperature without shivering (American Journal of Physiology)
- Brown adipose tissue was visible in the neck, supraclavicular region, chest and abdomen under PET-CT scanning only after the subject was exposed to mild cold exposure (New England Journal of Medicine)
- Mild cold exposure can prevent increases in body weight (Obesity Journal)

## **Cooling the body for Athletic Performance**

- KewlFit™ (See page 38-39) uses a specific temperature gradient that does not cause a vasoconstriction response. It uses 58°F (14°C) to maximize the amount of heat pulled from the body to moderate core body temperature. (Stacey Sims PhD, Exercise Physiologist and Thermoregulatory Specialist, Stanford University.)
- Athletes who pre-cool can perform at their highest level, 10 to 20 percent longer than those who don't (Stanford University)
- Run time increased by 17% with pre-cooling (Medical Science Sports Exercise)
- After pre-cooling, less blood is sent to the skin, so more oxygen-rich blood goes to the muscles. (Running Times Magazine)
- Pre-cooling with a cooling vest allows more work to be performed before fatigue is reached (American Physiological Society)
- Pre-cooled athletes were able to sustain higher exercise intensity and provides a distinct thermal advantage for exercise (British Journal of Sports Medicine)
- After pre cooling, subjects saw an increases in heat storage capacity and distance cycled (Charles Sturt University)
- Cooling Vests worn during active warm-up enhances performance & reduces thermal and cardiovascular strain (American Physiological Society)
- Pre-cooling allows a greater rate of heat storage, with the effect of reducing the rate of rise in core temperature (British Journal of Sports Medicine)
- Activation of thermogenesis through brown adipose tissue stimulation is an anti-obesity tool (Stockholm University)
- Brown adipose tissue, depending on its thermogenic activity, may contribute to the control of body fat metabolism in humans (Obesity Journal)



# POWERED BY

COOLPAX







# PHASE CHANGE COOLING VESTS

#### Product #6626HV

TechNiche PHASE CHANGE

ANSI Class II HI VIZ COOLING VEST

Powered by CoolPax™

#### Style: High Visibility

- Same product features as 6626
- Outer 100% polyester, inner liner 100% cotton, made with thermal liner
- ANSI Compliance: Class II
- One set of 6665V Cool Pax<sup>™</sup> inserts is included with each vest and one cooler bag
- Color: Hi Viz Lime with Silver Reflective Tape
- Sizes: M/L (100-175 lbs), L/XL (175-250 lbs), XXL (250-300 lbs), Custom
- Total Weight (including 6665V Cool Pax™): 6 lbs/2.7 kgs
- Insert Compatibility: 6665V and 7065V













#### Product #6626

TechNiche PHASE CHANGE

# **COOLING VEST**

Powered by CoolPax™

- V-neck with zipper closure
- Hook and loop girth and shoulder adjustments
- 100% cotton vest, with thermal liner
- One set of 6665V Cool Pax™ inserts is included with each vest and one cooler bag
- Deploy extra Cool Pax<sup>™</sup> to achieve continuous cooling
- Sizes: M/L (100-175lbs), L/XL (175-250 lbs), 2XL (250-300 lbs), Custom
- Total Weight (including 6665) / (Cool Pax™): 6 lbs/2.7 kgs
- Insert Compatibility: 6665, 6665V, 7065, 7065V























#### Product #6665V

TechNiche COOLING INSERTS

# with HOOK AND LOOP **STABILIZERS**

Powered By Cool Pax™

- Hook and loop stabilizers to secure packs in place
- Maintain a comfortable 58°F/14°C for 2-3 hours
- Used with 6626, 6626HV, 6626N, 6626I









