

HYDRATING HARD WORK

THORZT

HYDRATING HARD WORK



CATALOGUE VOL 7 - 2021 EDITION

DEHYDRATION & HEAT STRESS SOLUTIONS



ABOUT THORZT...

OUR WHY IS YOU...

- HYDRATING HARD WORK
- HYDRATING A MATE
- CREATING THE BEST TASTING AND QUALITY PRODUCTS TO KEEP YOU HAPPY, HEALTHY AND HYDRATED DAY IN, DAY OUT

We're Aussie made, founded by four mates, all elite-level athletes, a couple of us Olympians, who identified that sustained hydration – just as experienced in sporting events – was being sought in the industrial workplace where dehydration is a factor reducing work efficiency and safety.

Our quest is never ending, as research shows that 50-60% of the industrial workforce start the day in a mildly dehydrated state, every day. ⁽⁴⁾



WHAT IS DEHYDRATION

IT ONLY TAKES 1% OF DEHYDRATION TO RESULT IN LOWERED PRODUCTIVITY!

Most of us think of dehydration as a summer problem. The days are longer and warmer, you're sweating more. To compensate, you hydrate yourself with THORZT and a balanced diet. What many people don't realise, however, is that it's just as easy to become dehydrated in the winter.

THORZT is the hydration solution for the weekday worker and the weekend warrior so it doesn't matter if you are on a construction site, the footy field, about to ski down a mountain or sitting in an office with the air conditioner on, THORZT has a product for you.

HOW DOES DEHYDRATION OCCUR

Dehydration occurs when fluids and nutrients are lost from the body at a faster rate than they are replaced. This results in an imbalance of the essential components of an efficiently working body. If you don't replace the lost fluids and minerals (electrolytes), you will become dehydrated. Blood is approximately 80% water and is responsible for the efficient transportation of vital nutrients around the body. Any imbalance reduces the efficiency of our bodies.

50-60%

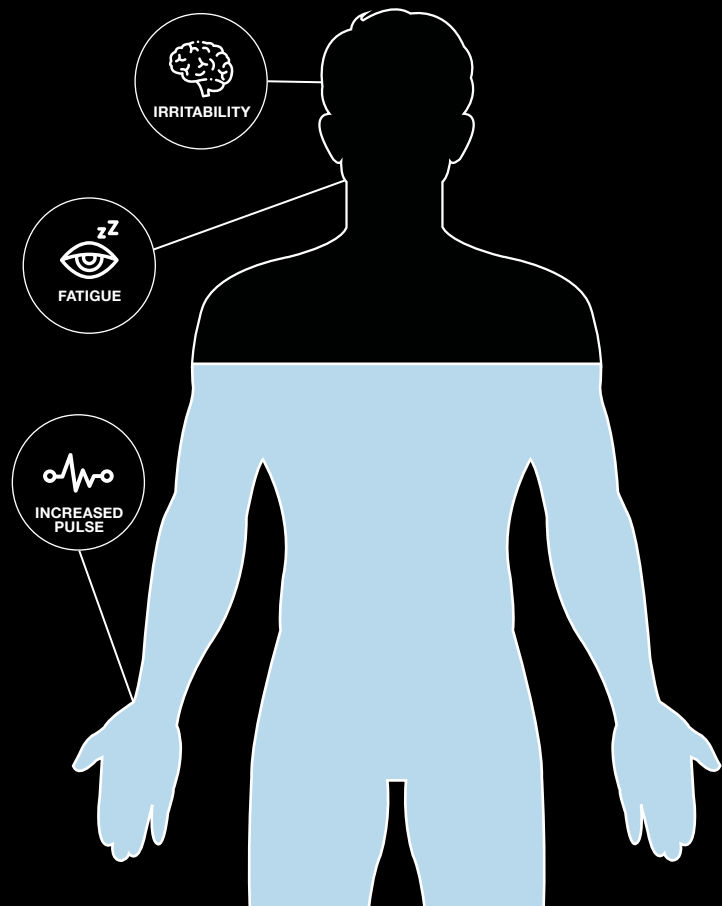
OF WORKERS REPORT TO WORK IN A MILDLY DEHYDRATED STATE⁽⁴⁾

Symptoms of dehydration are difficult to determine in the early stages, but can include dryness of the mouth and thirst, dry warm skin, dizziness, or cramping in the arms and legs.

Darker urine and thirst are the first signs of dehydration as it is your bodies way to reduce fluid lost and increase water intake.

AS DEHYDRATION INCREASES, SIGNS MAY INCLUDE:

- IRRITABILITY
- DROWSINESS
- IRRATIONAL THINKING
- SKIN INELASTICITY
- FACIAL FLUSHING
- INCREASED PULSE RATE
- DARKER URINE WITH AN ODOUR
- PASSING LESS URINE THAN NORMAL
- SUNKEN EYES
- FATIGUE (FEELING TIRED)



STAGES OF DEHYDRATION

THORZT

Dehydration adversely affects work productivity, safety and morale.⁽¹⁾ Loss of fluids can affect cognitive abilities, reduce performance and slow reaction times.^(2,3,4) This can lead to reduced output and careless work practices which may contribute to serious accidents in the workplace.

1%

DEHYDRATION

It only takes 1% of dehydration to result in lowered productivity! ^(9, 4)

2%

DEHYDRATION

At 2% dehydration, heart rate increases by 8 beats per minute (bpm) which increases perception of effort and reduces body performance by up to 30%. ^(2, 9)

3%

DEHYDRATION

At 3% dehydration, heart rate increases by 12bpm and performance is reduced by 25-50%. Reaction time is also slowed to levels similar to that of having a 0.08 Blood Alcohol Content (0.03 above the legal driving limit). ^(4,9)



THORZT

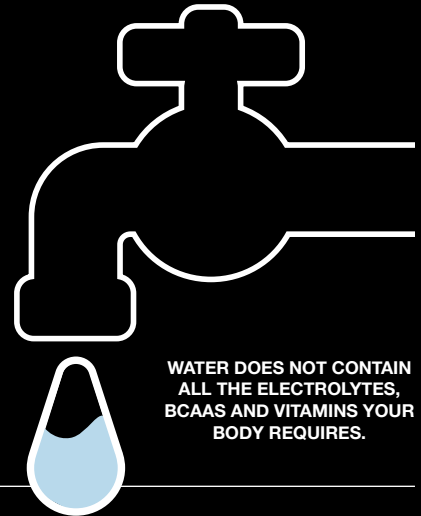
STAGES OF DEHYDRATION

STAYING HYDRATED

In thermally stressful environments (like mine sites) where workers can sweat anywhere from 1L - 2.5L per hour, (3, 4, 11) a specially formulated mixture of electrolytes is required to replace fluid losses and re-establish the correct fluid-electrolyte balance (9,10).

How well you will be hydrated will ultimately depend on the amount of fluids you consume! More fluids = more hydration! Other factors will then affect how well you stay hydrated:

- The rate at which you drink
- The composition of the drink (sugars, electrolytes, proteins, vitamins). (7, 8, 12)



THE THORZT FORMULA

Electrolytes

Electrolytes are naturally occurring essential minerals that control osmosis or movement of water within the body. Electrolytes also help maintain the acid-base balance required for normal cellular activities.

Common electrolytes include Potassium, Calcium, Sodium, Chloride and Magnesium. The body depends on electrolytes to perform vital functions by sending electrical signals from the brain to nerves that activate your muscles to perform mechanical functions.

Maintaining this electrical capability and voltage output of cellular communication is dependent on electrolytes. Most bodily functions require electrolytes, especially during neuromuscular processes. When the body loses fluid and electrolytes, both must be replaced for the body to rehydrate, retain fluid and return to efficient functioning before heat illness sets in. (5, 8, 13)

A common result of strenuous physical work or exercise is electrolyte loss. According to research, a deficiency in electrolyte may reduce physical performance and capacity as well as contribute to muscle cramps and weakness and injuries. (7, 13)

Sodium

Sodium is directly related to the control of body water, enhancing water absorption. Sodium also stimulates thirst, which increases voluntary drinking. The greater the sodium concentration of the hydration beverage the greater the restoration of fluid balance.

Potassium

Also aids in water absorption (lesser extent than Sodium) assists in muscle cramping.

Magnesium

Helps hold onto Potassium – water absorption. Allows the cell to use carbohydrates and amino acids. Assists in muscle cramping.

Zinc

Help maintain structural integrity of proteins and help regulate gene expression.

Branch Chain Amino Acids

Branch Chain Amino Acids play an essential role in protein synthesis and muscle building as well as recovery, accounting for over a third of Essential Amino Acids.

The addition of amino acids to carbohydrate-electrolyte drinks has been shown to increase fluid retention 15% greater than carbohydrate-electrolyte-only drinks, and 40% greater than water. (12)

Vitamins

The B vitamins are also important for a normal appetite, good vision, healthy skin and nervous system, and red blood cell formation. They function as coenzymes that help the body obtain energy from food and drink. The body needs vitamin C, also known as ascorbic acid or ascorbate, to remain in proper working condition. Vitamin C benefits the body by holding cells together. Since our bodies cannot produce or store vitamin C, an adequate daily intake of this nutrient is essential for optimum health. (15)

LOSS OF FLUIDS

LOSS OF FLUIDS CAN AFFECT COGNITIVE ABILITIES, REDUCE PERFORMANCE AND SLOW REACTION TIMES^(2, 3, 4)

HOW TO MONITOR HYDRATION IN 3 EASY STEPS!

It is important to monitor your hydration to ensure you stay hydrated throughout the day/night.

1.

MONITOR URINE COLOUR

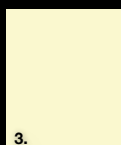
The following chart is a guide that outlines when to hydrate based on the colour of urine. If your urine matches the colours numbered 1, 2, or 3 you are hydrated, but keep drinking fluid. If your urine matches the colour numbered 4 through 8 you are dehydrated and need to drink far more fluid.



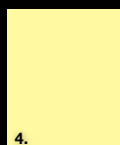
1.



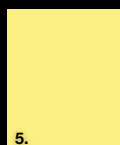
2.



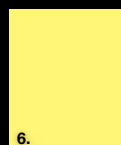
3.



4.



5.



6.



7.



8.

SAFE ZONE

Optimal hydration, keep drinking.

2. CAUTION

Mild dehydration, increase fluid intake.

3. WARNING

Severe dehydration.
Seek medical attention.

2.

MONITOR FLUID INTAKE



Drink 250mls of water every 15 minutes in warm environments.

Outdoor Workers: For every 3 cups of water, drink 1 cup of THORZT (3:1)

Indoor Workers: For every 6 cups of water, drink 1 cup of THORZT (6:1)

Increase electrolyte intake when experiencing extreme sweating

3.

MONITOR YOUR SIGNS & SYMPTOMS OF DEHYDRATION



Key signs of dehydration:

- Reduced performance
- Slower reaction times
- Thirst
- Weight loss

Each kilogram (kg) of weight loss is equivalent to approximately one litre (L) of fluid.

99% SUGAR FREE HYDRATION POWDERS

THORZT is a great tasting, scientifically proven mix of cutting edge vitamins, minerals and amino's. All formulated for rapid re-hydration .

Designed to maintain mind and body function at a cellular level, THORZT can boost your physical and mental potential, relieve muscle pain, cramps and spasms, reduce anxiety and sleep disturbance and improve the body's stress response.



MADE IN AUSTRALIA

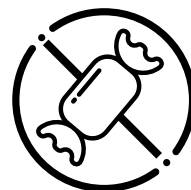


CHOOSING THE RIGHT ELECTROLYTE DRINK

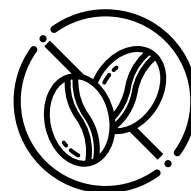
	HYPOTONIC	ISOTONIC	HYPERTONIC
% CARBOHYDRATES	Less than 4%	4 - 8%	Greater than 8%
OSMOTIC PRESSURE	Lower than bodily fluids	Same as bodily fluids	Greater than bodily fluids
RATE OF ABSORPTION	Faster than water	Same as water	Slower than water
BEST USED FOR	Rapid rehydration	Rehydration / Energy	Energy



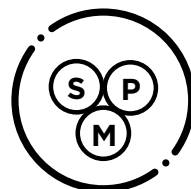
99% SUGAR FREE POWDERS



**SUGAR
FREE**



**CAFFEINE &
GLUTEN FREE**



**PROPRIETARY
ELECTROLYTE
FORMULA***

*Sodium, potassium and magnesium
formula



MAKES 600ML

SSSFMIX

HYPOTONIC

99% SUGAR FREE SOLO SHOTS

- 99% Sugar Free
- Available in 5 delicious flavours - Blue Lemonade, Lemon Lime, Orange, Tropical, Wild Berry
- Gluten and caffeine free
- Proprietary electrolyte formula inc. Sodium, Potassium and Magnesium
- Proprietary blend of B and C group vitamins, L-Glutamine and essential Branch Chain Amino Acids
- 3g solo shot sachet makes 600ml
- Pack Qty: 50 x 3g/600ml sachets per pack
- Ctn Qty: 10 x packs of 50 x 3g/600ml sachets



SSSFBL



SSSFLL



SSSFOR



SSSFTR



SSSFWB

[CLICK TO VIEW VIDEO](#)

HYDRATED BY THORZT

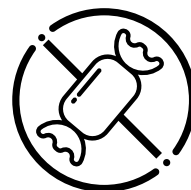


3G
SACHET

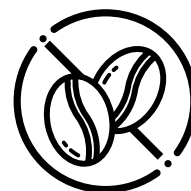
MAKES

600MLS

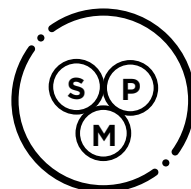
99% SUGAR FREE POWDERS



**SUGAR
FREE**

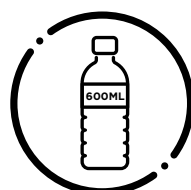


**CAFFEINE &
GLUTEN FREE**



**PROPRIETARY
ELECTROLYTE
FORMULA***

*Sodium, potassium and magnesium formula



MAKES 600ML

THVP5-MIX

HYPOTONIC

99% SUGAR FREE SOLO SHOT

- 99% Sugar Free
- Available in 5 delicious flavours - Blue Lemonade, Lemon Lime, Orange, Tropical, Wild Berry
- Gluten and caffeine free
- Proprietary electrolyte formula inc. Sodium, Potassium and Magnesium
- Proprietary blend of B and C group vitamins, L-Glutamine and essential Branch Chain Amino Acids
- 3g solo shot sachet makes 600ml
- Portion control distribution with vend ready pack and retail packs
- Pack Qty: 5 x 3g/600ml sachets per pack
- Ctn Qty: 100 x packs of 5 x 3g/600ml sachets



THVP5-BL



THVP5-LL



THVP5-OR



THVP5-TR



THVP5-WB

[CLICK TO VIEW VIDEO](#)

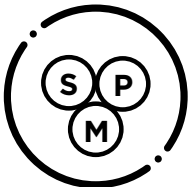
LOW SUGAR SOLO SHOTS



LOW
SUGAR



CAFFEINE &
GLUTEN FREE



PROPRIETARY
ELECTROLYTE
FORMULA*

*Sodium, potassium and magnesium
formula



MAKES 600ML

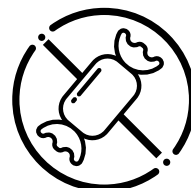
SSMIX6 HYPOTONIC

LOW SUGAR SOLO SHOT MIXED FLAVOUR

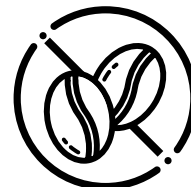
- Low in sugar
- Gluten and caffeine free
- 3 flavour mixed pack - Lemon Lime, Orange, Wild Berry
- Proprietary electrolyte formula inc. Sodium, Potassium and Magnesium
- Proprietary blend of B and C group vitamins, L-Glutamine and essential Branch Chain Amino Acids
- 26g solo shot sachet makes 600ml.
- Pack Qty: 6 x 26g/600ml sachets per pack
- Ctn Qty: 10 x packs of 6 x 26g/600ml sachets

[CLICK TO VIEW VIDEO](#)

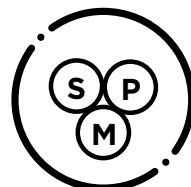
LIQUID CONCENTRATES



LOW
SUGAR



CAFFEINE &
GLUTEN FREE



PROPRIETARY
ELECTROLYTE
FORMULA*

*Sodium, potassium and
magnesium formula



MAKES 10 - 20L

LC10MIX

HYPOTONIC

LOW SUGAR CONCENTRATES

- Low in sugar
- Gluten and caffeine free
- Available in 5 delicious flavours- Peach Iced Tea, Lemon Lime, Orange, Pineapple Blast, Wild Berry
- Proprietary electrolyte formula inc. Sodium, Potassium and Magnesium
- Proprietary blend of B and C group vitamins, L-Glutamine and essential Branch Chain Amino Acids
- 600ml bottle makes 10L, or up to 20L when mixed with ice in our 20L cooler
- Ctn Qty: 10 x 600ml bottles



LC10ITP



LC10LL



LC10OR



LC10PB



LC10WB

[CLICK TO VIEW VIDEO](#)

LPD

LIQUID PUMP DISPENSER TO SUIT LC10 RANGE

- The THORZT Liquid Pump Dispenser is designed specifically to work with the THORZT Liquid Concentrate bottles to make the optimum mix in our bottles and coolers.
- Up to 1 pump per 250ml of water
- Pump sold separately



ONE BOTTLE
MAKES 20L WITH ICE



HYDRATION ICY POLES

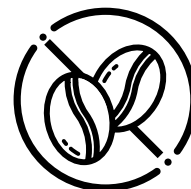
Initially trialled in 2003 with athletes and studied prior to the 2008 Beijing Olympics, (6, 14) the ingestion of ice was shown to be a superior method of lowering core body temperature than fluids served at 4°C.

In addition to the cooling benefits, crushed ice ingestion also improved endurance performance in the heat.

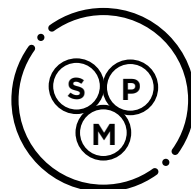
The cooling benefits observed for elite athletes have been replicated in occupational settings. Firefighters wearing protective clothing while working in an extremely hot fire cell were able to lower their core body temperature more effectively when they consumed crushed ice during a rest break than the standard practice of resting in the shade with a cold drink. (16)



LOW
SUGAR



CAFFEINE &
GLUTEN FREE



PROPRIETARY
ELECTROLYTE
FORMULA*

*Sodium, potassium and magnesium formula



SNAP & TWIST

ICEMIX

ISOTONIC

ICY POLE MIXED FLAVOUR PACK

- Low in sugar
- Gluten and caffeine free
- Proprietary electrolyte formula inc. Sodium, Potassium and Magnesium
- Available in 5 delicious flavours - Blue Lemonade, Lemon Lime, Orange, Tropical, Wild Berry
- When frozen, simply snap and twist the Icy Pole, breaking it in half
- Pack Qty: 10 x 90ml tubes per pack
- Ctn Qty: 15 x packs of 10 x 90ml tubes

[CLICK TO VIEW VIDEO](#)

SNAP, TWIST HYDRATE!





BOTTLES, COOLERS & HYDRATION BACKPACKS

**CONVENIENT
HYDRATION
OPTIONS NO
MATTER THE
LOCATION!**

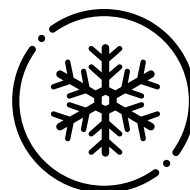
THORZT's comprehensive range of coolers, hydration backpacks and drink bottles offer convenient hydration options across any job site, workplace, sporting field or recreational endeavours to individuals or groups.



STAINLESS STEEL DRINK BOTTLES



ENVIRONMENTALLY
FRIENDLY



KEEPS COLD
FOR 24HRS



KEEPS HOT
FOR 12HRS



VACUUM
INSULATED
DOUBLE WALLS



BPA-FREE
NON-TOXIC

DB750SS-S

DB750SS-BK

DB750SS-BL

750ML STAINLESS STEEL DRINK BOTTLE STAINLESS STEEL

- Vacuum insulated double walls
- Made of food grade 18/8 stainless steel
- Eco-friendly
- Shockproof and shatter proof
- Rust and leak proof
- BPA-free non-toxic
- Keeps cold up to 24 hours
- Keeps hot up to 12 hours

[CLICK TO VIEW VIDEO](#)

SHOCK PROOF & SHATTER PROOF



DRINK BOTTLES

DB800

SPORTS DRINK BOTTLE 800ML

- Wide access for easy insertion of ice cubes
- Extra 200ml of space for ice or lighter mix taste
- Side window to monitor drink levels
- Easy to grip body.
- BPA-free
- Simply add one THORZT Solo Shot sachet to the drink bottle for the perfect mix and thirst quenching experience



BP

BOTTLE POUCH

- Ideal for THORZT 800ml and 750ml drink bottles
- Riveted at stress points for maximum strength
- Double stitched for durability
- Retro-reflective strip for increased visibility
- Fits most belt sizes up to 70mm width



TBP-B

BOTTLE POUCH BELT

- Used to hold your water bottle in the THORZT Bottle Pouch
- Allows your THORZT water bottle to be easily accessible and by your side at all times
- Made of durable polyester webbing
- Incorporates clip closure and adjustability for most wearers.



STAY HYDRATED
ON SITE WITH EASE



COOLERS

Independent testing showed THORZT coolers were able to maintain superior cooling results compared to that of other brands on the market. Tested for up to 8hrs at 40 deg heat, the temperature in the coolers rose by less than 1°C. THORZT's unique insulation properties were able to deliver superior results, keeping your fluids cooler for longer.



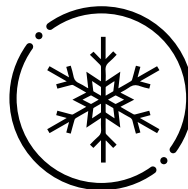
**ENVIRONMENTALLY
FRIENDLY**



**BPA
FREE**



**ROBUST &
STURDY DESIGN**



**SUPERIOR
INSULATED
COOLERS**



DC025B

2.5L DRINK COOLER

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Screw top lid to give wide access for ease of cleaning and filling with ice
- Easy pour spout
- Detachable drinking cup (400ml)
- Impact resistant exterior
- BPA-free

[CLICK TO VIEW VIDEO](#)



DC05B-NT

5L DRINK COOLER - NO TAP

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Dual screw top lid to give wide access for ease of cleaning and filling with ice
- Easy pour spout
- Detachable drinking cup (400ml)
- Impact resistant exterior
- Internal Volume Markings for accurate pour/measurement when mixing electrolytes
- BPA-free

[CLICK TO VIEW VIDEO](#)



DC05B | DC050

5L DRINK COOLER

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Dual screw top lid to give wide access for ease of cleaning and filling with ice
- Easy pour spout
- Detachable drinking cup (400ml)
- Recessed push button tap to protect and reduce damage
- Impact resistant exterior
- Internal Volume Markings for accurate pour/measurement when mixing electrolytes
- BPA-free

[CLICK TO VIEW VIDEO](#)



DC10B

10L DRINK COOLER

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Screw top lid to give wide access for ease of cleaning and filling with ice
- Screw tap for consistent flow and drip free shut off
- 10 litre capacity
- Impact resistant exterior
- BPA-free

[CLICK TO VIEW VIDEO](#)

**DC20****20L DRINK COOLER**

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Screw top lid to give wide access for ease of cleaning and filling with ice
- Screw tap for consistent flow and drip free shut off
- 20 litre capacity
- Impact resistant exterior
- BPA-free

[CLICK TO VIEW VIDEO](#)
**DC55B****55L DRINK COOLER**

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Screw top lid to give wide access for ease of cleaning and filling with ice
- Screw tap for consistent flow and drip free shut off
- 55 litre capacity
- Impact resistant exterior
- BPA-free

[CLICK TO VIEW VIDEO](#)
**IB21B****21L ICEBOX**

- Robust design with wide base for stability
- Superior insulation to maintain coolness
- Impact resistant exterior
- BPA-free

[CLICK TO VIEW VIDEO](#)

ACCESSORIES



DC05T

TAPS TO FITS MODELS:

- DC05B
- DC050



DC20T

TAPS TO FITS MODELS:

- DC10B
- DC20
- DC55B



DC025C

DRINKING CUPS TO FIT MODELS:

- DC025B



DC025L

LIDS TO FIT MODELS:

- DC025B



DC05-C

DRINKING CUPS TO FIT MODELS:

- DC05B
- DC050
- DC05B-NT



DC05-L

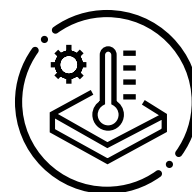
LIDS TO FIT MODELS :

- DC05B, DC050, DC05B-NT

THE PERFECT WORKMATE!



HYDRATION BACKPACKS



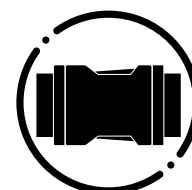
**COLD CELL
INSULATION**



**ADJUSTABLE
STRAPS**



**RETRO
REFLECTIVE
TAPE**



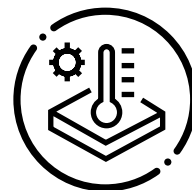
**QUICK
RELEASE**

BP250/BP25Y

3L HYDRATION BACKPACK

- Stylish, slimline design
- 3 litre bladder
- Cold cell insulation keeps water cool for hours
- Velcro tabbed protective cover
- Fully adjustable straps with quick release buckle to reduce risk of snag injuries
- V-Form retro reflective strips for low light visibility
- High-Vis yellow and High-Vis orange colour options provide added safety

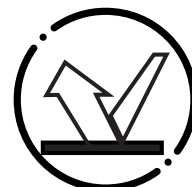
[CLICK TO VIEW VIDEO](#)



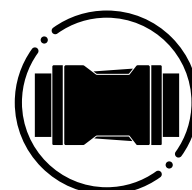
**COLD CELL
INSULATION**



**ADJUSTABLE
STRAPS**



**RETRO
REFLECTIVE
TAPE**



**QUICK
RELEASE**

BP25B

2L HYDRATION BACKPACK

- Stylish, slimline design
- 2 litre bladder
- Cold cell insulation keeps water cool for hours
- Velcro tabbed protective cover
- Fully adjustable straps with quick release buckle to reduce risk of snag injuries
- V-Form retro reflective strips for low light visibility
- 3 waterproof zip pockets



BPRT

NEOPRENE INSULATED HYDRATION TUBE

- Neoprene Insulated Hydration Tube
- 5.5mm diameter rapid liquid flow tube
- Quick release for easy cleaning
- Bite valve automatic flow/shut-off for hands free hydration
- Includes cover attachment to keep it clean and hygienic
- UV resistant



BPB | BPB2

REPLACEMENT BLADDERS

- Ethylene-Vinyl Acetate Copolymer (PVA), BPA-Free
- Large 55mm diameter filling port (accommodates addition of ice)
- Flexible, shock-proof
- Slide lock opening for hygienic cleaning
- BPB: 3L Bladder
- BPB2: 2L Bladder



COOLING APPAREL

**COOLING APPAREL
IS DESIGNED TO
ASSIST WITH HEAT
STRESS PREVENTION
BY PROMOTING
THE BODY'S
THERMOREGULATION**

In warm or humid climates, cooling is critical for many industries and has many benefits for worker performance. A cooler body improves the ability to sustain intensive workloads over long periods of time.

Cooler skin contributes to a number of physiological advantages:

- Less cardiac output is directed toward the skin
- A lower core body temperature
- Delay the onset of dehydration





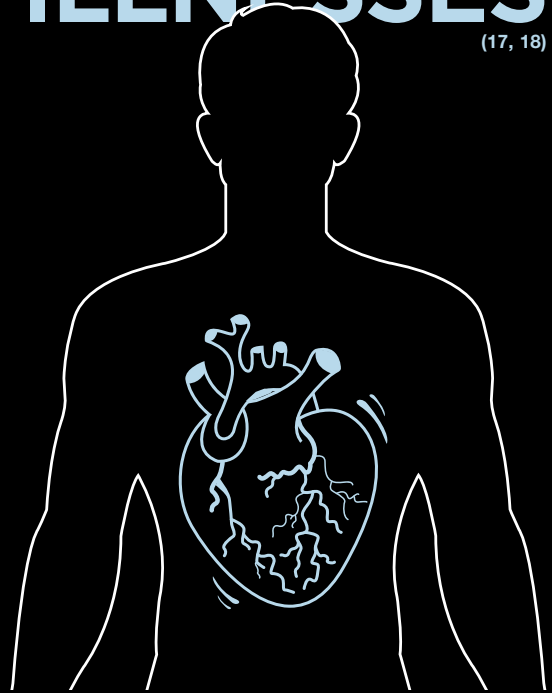
UNDERSTANDING HEAT RELATED ILLNESSES

(17, 18)

YOUR BODY HAS SYSTEMS IN PLACE TO CONTROL THE INTERNAL TEMPERATURE

Heat stress is a condition where your body loses its ability to control the internal temperature and finds it difficult to remove excess heat. It causes the body's core temperature to increase (above 37.5°C), resulting in conditions like heat rashes and muscle cramps. It can also cause your heart rate to increase, irritability and makes it difficult to focus on a task. In severe cases, heat stress can lead to heat stroke and heat exhaustion causing very high body temperatures, confusion, nausea, dehydration, fainting, and even death.

Working in the heat increases the risk of heat-related illness especially as a combination of the personal and environmental contributing factors change. Factors like increased temperature, higher humidity, working near hot equipment, increased physical exertion, wearing thick clothing or PPE, changes to personal fitness, sickness, poor diet and consumption of alcohol and high caffeine/sugar drinks.



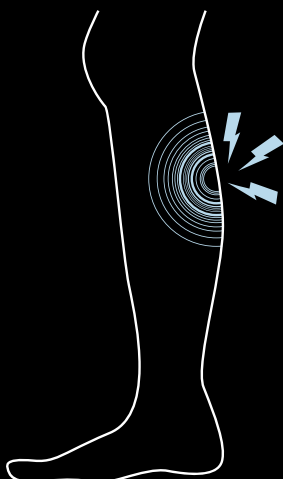
HEAT RASH

Symptoms

Mild inflammation of clogged sweat ducts. It may occur from profuse sweating and wearing heavy work uniforms and PPE. The blocked ducts prevent the sweat coming to the skin surface to evaporate. The rash is characterized by small, raised bumps (like coarse sandpaper) spread evenly across small patches of skin.

Treatment

Move to a cooler, less humid environment. Keep the affected area dry.



HEAT CRAMPS

Symptoms

Heat cramps are muscle spasms that result from loss of large amounts of electrolytes and water. Sweating depletes the body's salt and fluid levels that can cause these muscle cramps (especially when undertaking strenuous activities or work).

This can be dangerous when working in certain job situations. Heat cramps are associated with cramping in the abdomen, arms and calves.

Treatment

Drink water and electrolyte replacement solution like THORZT. Rest in a cool environment and do not return to strenuous activity until the cramps have ended.



IF STEPS ARE NOT TAKEN TO REDUCE BODY TEMPERATURE, HEAT EXHAUSTION CAN WORSEN AND BECOME HEAT STROKE

HEAT EXHAUSTION

Symptoms

Heat Exhaustion is the early symptom of heat stroke and the body's response to an excessive loss of fluids, and essential electrolytes, usually through sweating.

It is characterised by:

- Heavy sweating
- Tiredness
- Dizziness
- Vomiting
- Headache
- Paleness
- Weakness
- Cold and Clammy skin
- Fast and weak pulse
- Fast shallow breathing

Treatment

Stop work immediately. Replenish fluids (with electrolytes like THORZT). Move to a cool place, out of the sun and away from any heat sources. Take action to cool down (remove heavy PPE clothes, apply cooling apparel like THORZT Chill Towel, THORZT cooling vest, THORZT Scarf, sponge with cold water). Cool down further by taking a cool shower or bath. Seek medical attention if symptoms worsen or last longer than one hour.

HEAT STROKE

Symptoms

Heat stroke is the most serious form of heat injury. It is caused when your body temperature rises $>40^{\circ}\text{C}$ by prolonged exposure to excessive heat or heat and humidity. The heat-regulating mechanisms of the body become overwhelmed and unable to cool yourself down, causing the body temperature to climb uncontrollably

It is characterised by:

- High body temperature
- Disorientation
- Confusion
- Nausea
- Red hot dry skin
- Unconsciousness
- Throbbing headache
- Rapid strong pulse

Treatment

Call 000 for immediate medical assistance. Move to a cool place with circulating air. Remove or loosen any unnecessary clothing, including PPE. Use a fan to direct a gentle airflow over the body. Apply THORZT chill towel, THORZT cooling vests, THORZT scarf or cold packs or wrapped ice to neck, groin and armpits. Monitor body temperature and continue cooling efforts until body temperature drops below 38.5°C . If fully conscious, drink cool, but not cold, water with electrolyte solution like THORZT.



HEAT STRESS PREVENTION

BATTLING HEAT STRESS IN THE WORKPLACE CAN BE THROUGH PREVENTION OR TREATMENT, AND THERE IS ONLY ONE WAY TO ACHIEVE THIS - BY COOLING DOWN THE BODY'S CORE TEMPERATURE. AN EFFECTIVE WAY OF PREVENTING HEAT STRESS IS BY WEARING THORZT COOLING APPAREL.


CHILL TOWEL

Promotes thermoregulation.
Comforts and cools the skin. Looks
as cool as it feels.

COOLING WRIST BANDS

Promotes heat exchange at the wrist,
an area of high blood flow, enabling
the cooled blood to quickly circulate
around the rest of the body.





COOLING RANGER HAT

Prevents heat escaping and provides an instant cooling effect.

COOLING SCARF

Microfiber Evaporative Cooling.
UPF 50 chemical-free production.
Prevents heat escaping and provides an instant cooling effect.

COOLING VEST

When wet, stays cool while you're active. Lightweight and durable.

COOLING BROW PAD TO FIT HARD HATS

Comfortable, reusable and very durable. Prevents heat escaping and provides an instant cooling effect. Suitable for most hard hats.

COOLING CROWN PAD TO FIT HARD HATS

Comfortable, reusable and very durable. Prevents heat escaping and provides an instant cooling effect. Suitable for most hard hats.

EVAPORATIVE

COOLING TECHNOLOGY

HOW DOES EVAPORATIVE COOLING TECHNOLOGY WORK?

Evaporative cooling vests use the natural process of evaporation to help cool your body. Evaporation occurs when water is exposed to energy in the form of heat.

HOW LONG WILL COOLING LAST?

Cooling can last hours depending on environmental conditions.

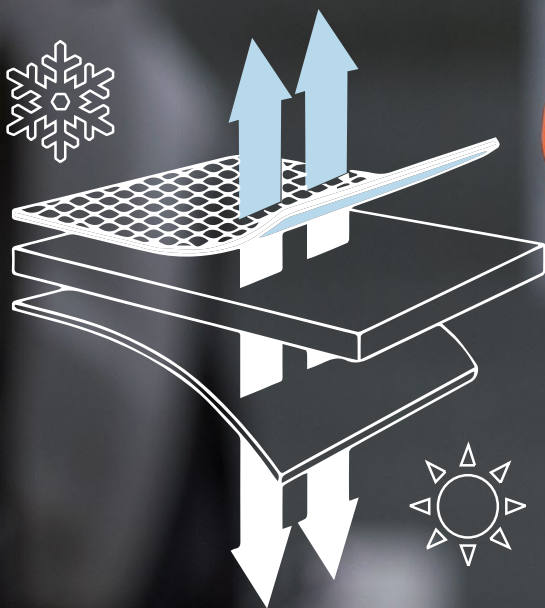
HOW TO WEAR?

For best results, evaporative cooling vests need to be worn on the outside of all other clothing.

SIMPLE ACTIVATION

1. Submerge the THORZT Cooling Slip Over Vest in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

BODY COOLING FROM EVAPORATION



EVAPORATED HEAT



**UNIQUE POLYMER
COOLING FABRIC**

**LIGHT WEIGHT
AND DURABLE**

THORZT

THORZT

THORZT



COOLING APPAREL



HAND WASH



DURABLE



LIGHT WEIGHT

CSOVO

EVAPORATIVE COOLING SLIP-OVER VEST

- When wet, stays cool while you're active
- Simple slip over vest
- Comfortable, quilted polyester outer with unique polymer cooling fabric inner
- Hand washable - doesn't effect cooling
- Lightweight and durable
- One Size Fits Most

ACTIVATION

1. Submerge the THORZT Cooling Slip Over Vest in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.



CSOVB



CSOVY



CSOVS



CSOVBK

[CLICK TO VIEW VIDEO](#)



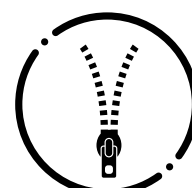
HAND WASH



DURABLE



LIGHT WEIGHT

ZIPPER
CLOSURE**ECVHVY****EVAPORATIVE COOLING VEST**

- Simple V-neck with zipper closure; works for a wide range of people and uses
- Can provide hours of cooling relief per soaking
- Lightweight, easy to activate, and durable
- Comfortable quilted nylon outer with unique polymer cooling fabric inner, water repellent nylon liner, and black poly-cotton trim
- Hand washable, doesn't effect cooling

ACTIVATION

1. Submerge the THORZT Cooling Vest in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

SIZE	CHEST	FRONT LENGTH
XS	79-84	51
S	86-91	52
M	94-99	53
L	102-107	54
XL	109-114	56
2XL	117-122	60
3XL	125-130	63

[CLICK TO VIEW VIDEO](#)

COOLING APPAREL

CSB

CHILL TOWEL

- Promotes thermoregulation
- Comforts and cools the skin
- Looks as cool as it feels
- Machine Washable

ACTIVATION

1. Soak and submerge in water..
2. Wring out the excess water, leaving it nice and moist.
3. Take hold of two corners, and wave it up and down for about 10 seconds.
4. Wrap it around your neck or other warm point on the skin for instant cooling relief.

REACTIVATION

Give it a quick wave every 15-20 minutes to reactivate the cooling process. Re-wet every few hours if needed.

[CLICK TO VIEW VIDEO](#)


CCRB | CCB

COOLING CAP

- Cooling Cap with Evaporative Cooling Brow Band
- Adjustable ties at the nape of the neck
- Ideal for wearing under a helmet, hard hat or alone
- When wet, stays cool while you are active
- Absorbent when dry, perfect for absorbing moisture and sweat
- Use for hours at a time, simply re-wet to reactivate
- Lightweight and durable
- Machine washable - cooling ability is not affected, reuse again and again

ACTIVATION

1. Submerge the THORZT Cooling Cap in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to keep cool.

[CLICK TO VIEW VIDEO](#)


CCRB



CCB

**CSHVY****COOLING SCARF**

- Microfiber evaporative cooling
- UPF 50 chemical-free production
- Lightweight stretch fabric with non-chafing elastic ends for comfortable cooling that will stay put
- Multi-purpose: protects from sun, defends against dust and debris, and keeps you cool at the same time
- Machine washable - cooling ability is not affected, reuse again and again

ACTIVATION

1. Submerge the THORZT Cooling Scarf in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to keep cool.

**CSK****CSRB****CSHVO****MULTIPLE WAYS TO WEAR**[CLICK TO VIEW VIDEO](#)

COOLING APPAREL

CTB | CTRB

COOLING TIE

- Promotes thermoregulation
- Reduces heat stress risks
- Comforts and cools the skin
- Looks as cool as it feels

ACTIVATION

Submerge your Cooling Tie in cold water for 15-20 minutes then wrap it around the neck, head or wrist (ideally at a pulse point) to immediately feel the cooling effect. You can also place the tie in the fridge or freezer overnight, then store in your esky/cooler on site for use later in the work day.

Cooling ties can be re-used as needed throughout the day by re-submerging in cold water for several minutes. However, it should be stressed that whilst this will deliver a refreshing feel, the main benefits of the ties come from the prolonged evaporative cooling that occurs over long periods.

[CLICK TO VIEW VIDEO](#)


CTB



CTRB

CWBB

COOLING WRIST BANDS

- When wet, stays cool while you're active
- Hook and loop closure for custom fit
- Comfortable, cool mesh polyester outer with unique polymer cooling fabric inner
- Hand washable - doesn't effect cooling
- Lightweight and durable
- One pack includes two Cooling Wrist Bands

ACTIVATION

1. Submerge the THORZT Cooling Wrist Bands in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

[CLICK TO VIEW VIDEO](#)


CBPB

COOLING BROW PAD TO FIT HARD HATS

- When wet, stays cool while you're active
- Rear elastic panel ensures a comfortable fit for all
- Comfortable, cotton outer with unique cooling fabric inner
- Hand washable - doesn't effect cooling
- Lightweight and durable

ACTIVATION

1. Submerge the THORZT Cooling Brow Pad in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

[CLICK TO VIEW VIDEO](#)


CCPO**COOLING CROWN PAD TO FIT HARD HATS**

- When wet, stays cool while you're active
- Hook and loop attaches easily to hard hat liner
- Comfortable, polyester mesh outer with unique polymer cooling fabric inner
- Hand washable - doesn't effect cooling
- Lightweight and durable

ACTIVATION

1. Submerge the THORZT Cooling Crown Pad in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

[CLICK TO VIEW VIDEO](#)
**CRHKM | CRHKL****COOLING RANGER HAT**

- When wet, stays cool while you're active
- Adjust with convenient strap clincher
- Lightweight and durable
- Comfortable, breathable outer with unique polymer cooling fabric inner
- Hand washable - doesn't effect cooling
- Low profile hook and loop size adjustment
- Sizes: Medium - CRHKM 58cm
- Large - CRHKL 60cm

ACTIVATION

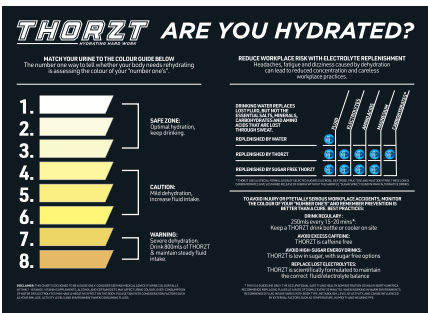
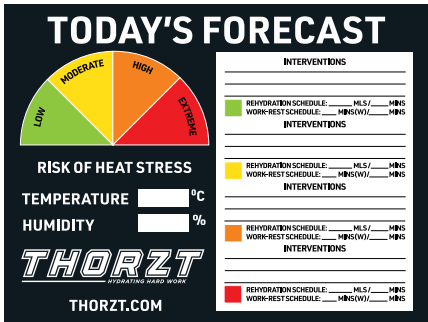
1. Submerge the THORZT Cooling Ranger Hat in any temperature water and let it soak for 1 to 2 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Wear to activate.

[CLICK TO VIEW VIDEO](#)


**LIGHTWEIGHT
& DURABLE**



HYDRATION ACCESSORIES



THOIHS

HEAT STRESS SIGNS

- Educational awareness
- Simple and can be displayed on site as a constant reminder to workers
- Size: 900mm x 1200mm

THOHG

HEAT STRESS SIGNS

- Educational awareness
- Simple and can be displayed on site as a constant reminder to workers
- Size: 900mm x 1200mm



PENUSG

REFRACTOMETER USG PEN

- Digital refractometer for a more accurate Urine Specific Gravity (USG) reading
- Delivers a nearly instantaneous result of USG
- Automatically calibrates itself to water and is ready to use in seconds
- LCD display is easily read, even with dim light
- While urine colour works well as a quick and easy guide, a far more accurate reading can be attained by using a Refractometer. The ATAGO Pen Refractometer (Model No. 3471) is designed to measure USG (Urine Specific Gravity), being a more effective and efficient way to assess hydration status. Lighter coloured urine is more dilute (i.e. it has less molecules per volume) and has a specific gravity closer to that of water (1.00), indicating a good hydration status.

[CLICK TO VIEW VIDEO](#)

MF

POWER COOLER MISTING FAN

The THORZT Power Cooler Misting Fan is a unique cooling system that creates a comfortable, cool environment both indoors and outdoors.

- Reduces temperatures by up to 15°C
- Cools up to 300m2
- Integrated easy fill 60L water tank
- Plays a vital role in heat illness prevention
- Robust design with wheels for mobility - one person move

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INDUSTRIAL ATHLETE PROGRAM

HYDRATING HARD WORK

We created our programs and education built for Industry... designed from all the feedback you asked for help with by our expert team within THORZT, who also happen to be Olympians so we can hydrate hard work of any kind...

IF THE FOLLOWING EXAMPLES HELP DESCRIBE YOUR WORKPLACE OR TEAM, YOU'RE NOT ON YOUR OWN.

- Time poor to develop and roll out educational awareness programs
- Ad hoc hydration program when it gets hot
- Reactive in summer
- Needing something that is sustainable and repeatable that work teams 'GET'

HOW WE CAN HELP...

BENEFITS OF THORZT'S INDUSTRIAL ATHLETE PROGRAM

- Delivers educational toolboxes and conversations around dehydration, heat stress and fatigue in the workplace
- Sustainable and repeatable programs specifically for the workers
- Empowers management
- Educates workers and drives hydration adoption
- Better health
- Increased energy
- Improved mood
- Improved workplace morale
- Greater productivity
- Increased safety

HOW WE DO THIS FOR YOU...



ANALYSE CURRENT PROGRAMS AND OBJECTIVES.



IMPLEMENT

Training, testing, programmed drinking and cooling strategies.



ASSESS AND REVIEW

Continued testing, data tracking, education and program review.



REDUCE ASSOCIATED COSTS

Via less heat stress, dehydration incidents on site, programmed drinking reducing over consumption of electrolytes.



HYDRATION TESTING



SHARING DATA FOR CONTINUED LEARNING AND IMPROVEMENT.

PROGRAM LEAD: DAVID RHODES & LUKE MICHAEL

Program lead: David Rhodes and Luke Michael

THORZT's Industrial Athlete Program is run by David and Luke. Given their history, David and Luke are well positioned to discuss the parallels between industrial workers and athletes, and how the THORZT program has been designed.

"It's not all about drinking electrolytes, they aren't the silver bullet. It's about knowledge and understanding we can over complicate things. It's about doing the basics really well, and knowing where THORZT can play a role, we then surprise ourselves with the positive results we can get in our heat stress and hydration solutions."

UNLIMITED SUPPORT VIA OUR 1800 THORZT HOTLINE

THORZT

MANAGED BY OUR EXPERIENCED THORZT TEAM WHO DELIVER:



SERVICE EXCELLENCE

PRODUCT KNOWLEDGE, INDUSTRY
KNOWLEDGE, CUSTOMER ENQUIRY



EXPERTISE

TO FIND SOLUTIONS FOR ANY
OF OUR CUSTOMERS NEEDS

125+

YEARS

COMBINED EXPERIENCE & KNOWLEDGE IN
UNDERSTANDING HYDRATION & HEAT STRESS

6
AUS & NZ

DISTRIBUTION HUBS

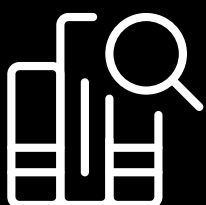
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FOR FLOOR TO STORE FAST DELIVERY

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THORZT



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THORZT
HYDRATING HARD WORK

FROM

PARAMOUNT
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