

WATERJEL FACT SHEET

WHAT IS WATER JEL?

The jel itself is a water-based combination of natural oils (such as menthol) and a water soluble gel. For medical use it is supplied in the form of Jel soaked dressings. The dressing itself is made from 100% pure Polyester with patented open weave intercellular pockets, enabling it to absorb up to 13 times its own weight in Jel. The Jel is known to have thixotropic qualities, which means it will adhere to the dressing unless it is shaken vigorously.

The blanket has the same properties as above but is made from 100% pure Virgin Wool.

HOW DOES IT WORK?

When a casualty sustains a burn to the skin, the temperature increase and subsequent damage to the underlying tissues may still be in effect for up to 10 minutes or more after contact with the heat source etc. This exposure to the heat source and the body's reaction to the injury is known as **BURN PROGRESSION**.

Water Jel works by drawing the heat from the damaged skin and underlying tissues, by HEAT TRANSFERENCE (also known as the "Marble Effect"). Because it works by heat transference it can stabilise the skins temperature, unlike water that actually causes an unstable skin temperature.

Note: Water Jel's heat transference abilities are so effective that when the unopened dressing is picked up, it will actually feel cool to the touch.

WHO CAN USE IT?

The dressing is ideal for use with the following skill levels: First Aider, Nurse, Paramedic, Ambulance Technician.

It can also be used with good effect by the lay person with no first aid knowledge as long as they are aware of need to refer the casualty to medical aid (hospital) for the burn to be evaluated.

The dressing has recently been accepted as the London Ambulance Service's front line method of dealing with all non-chemical burns. It has likewise been accepted by the Royal Army Medical Corps for the same purpose.

WHAT ARE ITS ADVANTAGES OVER WATER?

1. It is highly portable and offers protection to staff where the potential for a burn is high but water is not readily available, i.e. plant rooms.
2. It cools by heat transference, unlike water which cools by evaporation thus reducing the risk of HYPOTHERMIA.
3. Staff time away from the workplace is greatly reduced. First Aid treatment for burns with water is based around the damaged area/limb being placed in cold water before the burn can even be evaluated or the casualty being sent to hospital.
4. Water Jel is the ultimate transit dressing, once placed on a burn it starts to work immediately and continues to work whilst in place during transport to hospital.
5. The dressing is bacterio-static, and therefore offers sterility, it provides positive inhibition against 5 micro-organisms (prevents growth).
6. Burns to the face, neck and torso etc, are difficult to treat with water. Water soaked dressings placed on such areas in an attempt to provide a reduction in tissue temperature may actually **maintain** the increased temperature by insulating the burn in a similar way to a diver's wet suit.

CONTRA-INDICATIONS

Water Jel is not suitable for use on the mucous membranes, eg the eyes.

There is concern amongst staff at St Andrews Hospital (Billericay Burns Unit) that the Jel is particularly unsuitable for use on infants (under one year old). Several cases of local irritation have been reported since the product became the L.A.S.'s frontline burn dressing.

WHAT THE PROFESSIONALS SAY ABOUT WATER-JEL

SEVERAL CASUALTIES WITH MAJOR BURNS

"The quickness and effectiveness in applying the dressings was a great advantage to all concerned, once the dressing was applied to the burnt area it seemed to provide rapid pain relief"

Paramedic - London Ambulance Service

70 YEAR OLD MALE

40% BURNS TO HEAD, BACK AND LIMBS, C.V.A., POSSIBLE SMOKE INHALATION

"Proved very easy to use, quick compared to the conventional method and moulded well to the patients body. It was nice not having to worry about finding somewhere to saturate and keep sterile the burns sheets. We could concentrate on other aspects of patient care which has been difficult in the past."

"Overall we were very impressed with them and found that they had several advantages over the usual dry burns sheets and sterile water".

Paramedic - Beds & Herts Ambulance

2 YEAR OLD CHILD

2-3% BURNS TO RIGHT HAND (PULLED OVER A CHIP PAN)

"The crew applied Water-Jel and dressed the wound, the child was then flown to Treliske casualty."

Ten minutes after arrival at Treliske, to my surprise the child was being discharged. The receiving nurse said the child came in with his mum, was not distressed, or in pain, when the Water-Jel was removed all that remained was a small blister with no reddening around it. Mother, Nurse and I were all very pleased with the product."

Ambulance Officer - Cornwall Ambulance Service

YOUNG BOY

25% BURNS TO HAND, LEGS, FACE AND HEAD

"They (The Ambulance Crew) used the new Burns Kit (Water-Jel), it was easy to use, he suddenly appeared to be less shocked and comfortable as the kit was applied." "I feel the new burns kit saved him from even more severe skin damage and at the time of the accident it cooled, treated and made him feel very comfortable"

Ambulance Officer, Off-Duty

Product name / group:

WATERJEL PRODUCTS				
Features		Benefits		
96% ULTRA-PURE DEIONIZED WATER		COOLS BY HEAT TRANSFER, NOT BY EVAPORATION		
FULLY COVERS AREA OF THE BURN AND BECOMES A VAPOUR BARRIER		PREVENTS FURTHER CONTAMINATION OF THE WOUND AND ALSO HELPS TO PREVENT BODY FLUID EVAPORATION.		
THE 'CARRIER' OF WATERGEL IS A STERILISED PATENTED WEAVE OF 100% VIRGIN WOOLFOR THE BLANKET AND 100% POLYESTER FOR THE DRESSING		HELPS TO STABILISE BODY TEMPERATURE, REDUCING THE CHANCES OF HYPOTHERMIA.		
ADDED WETTING AGENT		ONCE BODY TEMPERATURE IS LOWERED TO NORMAL RANGES THIS WETTING AGENT ABSORBS AND PENETRATES INTO THE BURNT CLOTHING WHICH CAN THEN BE MORE EASILY REMOVED.		
BACTERIOSTATIC AGENT		FURTHER PROTECTION AGAINST ADDITIONAL BACTERIAL CONTAMINATION		
PH OF WATERJEL IS BETWEEN 4.2 AND 4.5		THIS CLOSELY MATCHES THE PH OF NORMAL SKIN. SALINE GENERALLY HAS A PH OF ABOUT 7 AND DOES NOT INHIBIT CONTAMINANT GROWTH ON THE SURFACE OF THE SKIN IN THE SAME MANNER THAT WATER-JEL DOES.		
WATER-SOLUBLE		ENABLES PRODUCT TO BE REMOVED DURING NORMAL WASH DOWN PROCEDURES.		
Product Specifications				
GEL:				
APPEARANCE	- OFF WHITE TRANSLUCENT	CONSTRUCTION	BLANKETS	DRESSINGS
ODOUR	- CHARACTERISTIC MENTHOL	COLOUR	100% VIRGIN WOOL	100% POLYESTER
SPECIFIC GRAVITY	- 0.98 - 1.05	DESCRIPTION	OFF WHITE	WHITE
P.H.	- 4.5 - 6.00		DOUBLE CELLULAR WITH WOVEN 2" SQ. POCKETS	DOUBLE THICKNESS BONDED WITH 2" SQ. POCKETS
NON TOXIC				
METHOD OF STERILISATION - GAMMA RADIATION (DRESSINGS)				
THE FOIL WRAPPED DRESSINGS HAVE A STERILITY LIFE OF 5 YEARS, THE BLANKETS AND BOTTLES 3 YEARS, ALTHOUGH THERE ARE NO GUIDELINES FOR THE BLANKETS.				
PACKAGING HAS BEEN SPECIALLY DEVELOPED TO PREVENT ANY INTERACTION WITH THE PRODUCT.				
MICROBIOLOGICAL CHALLENGE				
MICRO-ORGANISM		RESULT		
Staphylococcus Aureus -		POSITIVE INHIBITION		
Pseudomonas Aeruginosa		POSITIVE INHIBITION		
Bacillus Subtilis		POSITIVE INHIBITION		
Candida Albicans		POSITIVE INHIBITION		
Apergillus Niger		POSITIVE INHIBITION		