



# Caring for baby skin

Scientific research for  
healthcare professionals

**WaterWipes®**  
THE WORLD'S PUREST BABY WIPES

# Caring for delicate infant skin

A newborn's skin is vulnerable and delicate, with the infant skin barrier continuing to develop and strengthen during the first year of life.<sup>1</sup> Protection is a key function of the mature skin barrier, acting as a defense against allergens, infections and irritants.

## Structural differences between baby and adult skin

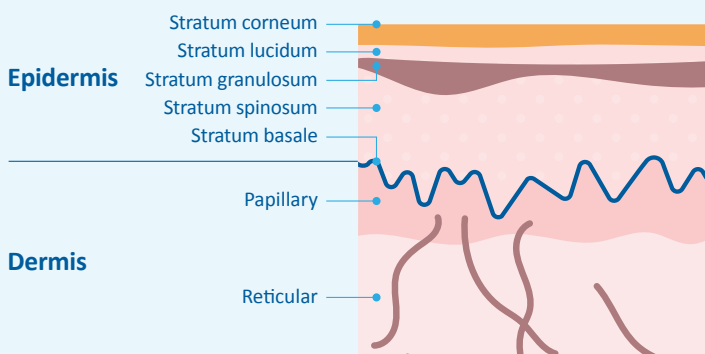
The skin of infants and young babies is unique compared with that of older children and adults. The epidermis in babies is 20% thinner and the stratum corneum is 30% thinner,<sup>2</sup> which increases susceptibility to permeability and dryness.<sup>3</sup>

## Increased trans-epidermal water loss (TEWL)

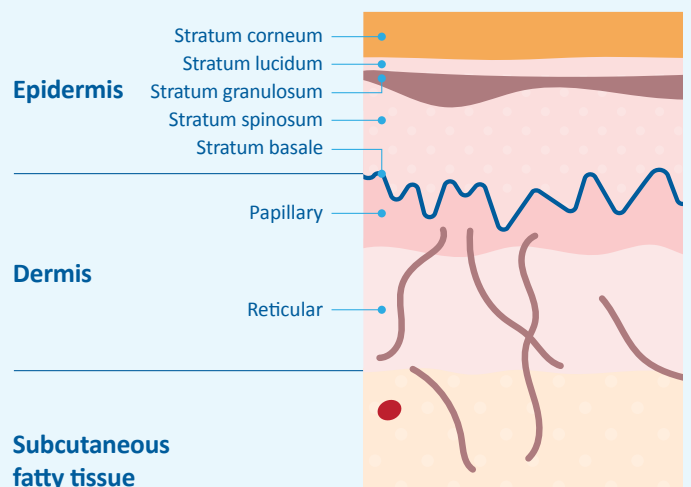
Baby skin is also less firmly attached than mature skin and has a higher propensity for increased TEWL and reduced stratum corneum hydration, reflecting a less effective skin barrier function.<sup>3,4,5</sup> Also, because the ratio between baby body surface to baby body weight is higher, topical agents are more readily absorbed and can therefore have a more pronounced effect on baby skin.<sup>3</sup>

## Comparison of baby skin to adult skin, showing thinner epidermis and stratum corneum

### Newborn skin



### Adult skin



*Transepidermal water loss (TEWL) is a normal process of the skin.*

**Babies thinner skin, increased TEWL and higher body surface to body weight ratio combine to make baby and infant skin a less effective barrier. As a result it is far more delicate and vulnerable, requiring special care and protection.**

## **Understanding products for baby skin**

It is recommended that any topical agents used for bathing and cleansing newborns and infants, should not adversely alter or affect the protective skin barrier.<sup>3</sup>

When considering products for use on neonate or infant skin, the aim should be to use those that help preserve the skin barrier function of the stratum corneum.<sup>3</sup> Ideally, they should be pH neutral (pH



5.5–7), fragrance free, alcohol free, contain only a mild preservative<sup>6</sup> and have as few ingredients as possible.

There is no single irritant that causes diaper rash, although prolonged contact of the skin with urine and feces in the diaper is considered the most common factor.<sup>7</sup> It is therefore crucial that diapers are changed regularly and the area is thoroughly cleaned.

**Helping parents select the correct types of products and ingredients for use on their baby's skin is important to help minimize skin conditions such as diaper rash and eczema, and preserve the skin barrier function.**

# WaterWipes® – the world's purest baby wipes

## The WaterWipes story

WaterWipes, the world's purest baby wipes, were developed by Edward McCloskey. As a new father, Edward was searching for a safer alternative to standard baby wipes for his baby daughter, who suffered from sensitive skin and diaper rash. He wanted to create a product that was as mild and pure as using cotton wool and water, but as convenient as a wipe and safe for the most delicate skin. Following many years of extensive scientific research and testing, WaterWipes were launched in Europe in 2008 by Edward's company, Irish Breeze, a well-established skin care company.



**We know that newborn and infant skin is different to that of older children and adults. It's constantly evolving and can take up to a year to fully mature and function in the same way as adult skin. Encouraging parents-to-be and new parents to choose a baby wipe with minimal ingredients will help preserve the skin barrier function and minimize skin conditions such as eczema.**

**Robert Guaran, Neonatology Advisor,  
NSW Perinatal Services.**



### Other wipe products



### WaterWipes® THE WORLD'S PUREST BABY WIPES



**WaterWipes are a non-medicated wipe option made with 99.9% high purity water and a drop of fruit extract. Other baby wipes on the market contain an average of 17 ingredients.\***

\*Calculation based on the average number of ingredients included within mainstream baby wipe products available globally.

## What makes WaterWipes different?

- WaterWipes have been found by the Skin Health Alliance to be purer than using cotton wool and water, therefore helping maintain the important skin barrier function of the stratum corneum, while offering the convenience of a wipe
  - WaterWipes provide gentle cleansing for the most delicate newborn skin and can be used on babies from birth
  - WaterWipes are so gentle they can also be used on premature babies
  - WaterWipes are dermatologically tested and fragrance free to help reduce the risk of drying out delicate baby skin and the potential development of contact or allergic dermatitis<sup>8</sup>
  - WaterWipes are made using just two ingredients, 99.9% purified water and a drop of grapefruit seed extract (GSE), making them the purest baby wipes in the world. GSE acts as a gentle skin cleanser and conditioner.
- WaterWipes lower incidence and shorten duration of diaper rash in full-term and preterm babies <sup>9,10</sup>



# WaterWipes are purer than cotton wool and water

Based on a review of scientific literature by its independent team of experts, the Skin Health Alliance has validated that WaterWipes baby wipes are purer than using cotton wool and water.



## Cotton wool and water\*

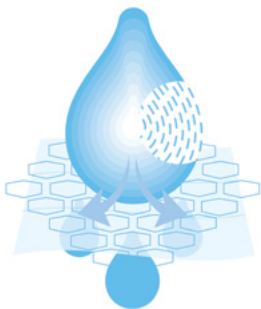
### Water

Impurities and other minerals

### Cotton wool

Detergents and impurities

*\*cooled boiled water*



**WaterWipes**  
THE WORLD'S PUREST BABY WIPES

**7-step purification process**  
Removes impurities, softens and purifies the water

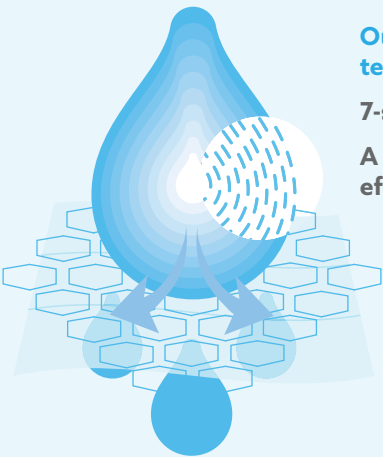
**Fruit extract**  
Helps maintain skin integrity

Validated by



# The WaterWipes technology

The water used within WaterWipes is what makes the product unique. WaterWipes are manufactured under clean room conditions using a unique purifying technology. The water passes through a seven-step purification process that uses a series of filters to remove **impurities**, **soften** and **purify** the water. This purifying process makes the water significantly **purer than cooled boiled water** and produces a unique product that effectively cleanses the skin, without the need for several additional cleansing ingredients.



**Our water technology**

**7-step purification**  
**A deeper & more effective clean**

## AVERAGE NUMBER OF INGREDIENTS

**WaterWipes**  
THE WORLD'S PUREST BABY WIPES

2

**Pure** wipes

7

**Natural** wipes

10

**Sensitive** wipes

15

**Standard** wipes

16

# Minimal ingredients

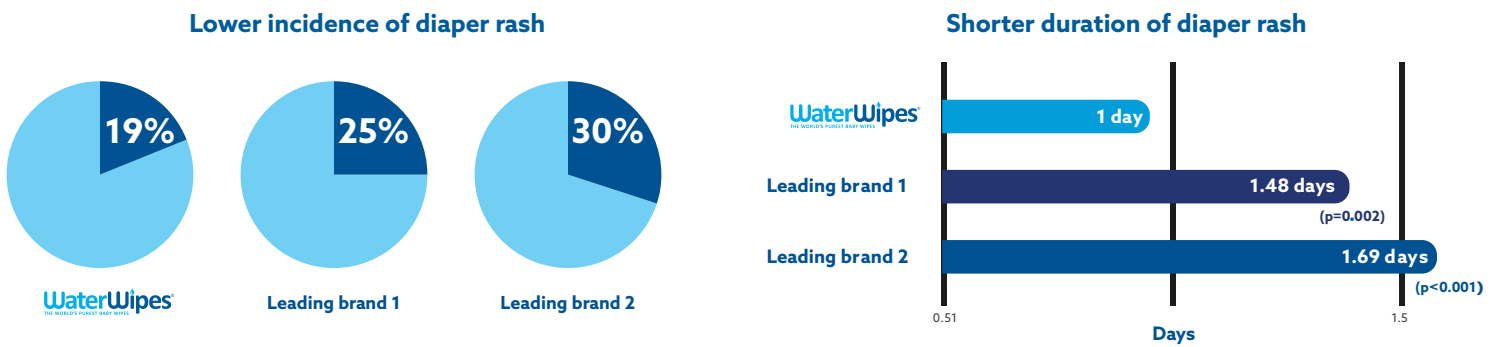
Parents are increasingly looking for products with minimal ingredients. Even in wipes considered 'pure' or 'natural', the average number of ingredients start at seven. WaterWipes contain just two, 99.9% purified water and a drop of GSE.



# WaterWipes lower incidence and shorten duration of diaper rash in full-term and preterm babies

## Full-term babies

A clinical study amongst 698 mothers, showed babies cleansed with WaterWipes had a lower incidence and a shorter duration of moderate to severe diaper rash compared to other leading brands, marketed as mild and gentle enough for newborn skin.<sup>9</sup>

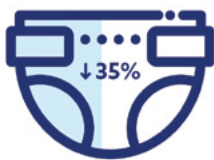


## Preterm babies

An independent clinical study of over 1,000 premature babies in a NICU, showed use of WaterWipes, along with perineal skin care guidelines lowered incidence and shortened duration of diaper rash.<sup>10</sup>



**Reduced overall diaper rash** incidence in premature babies by **17%**



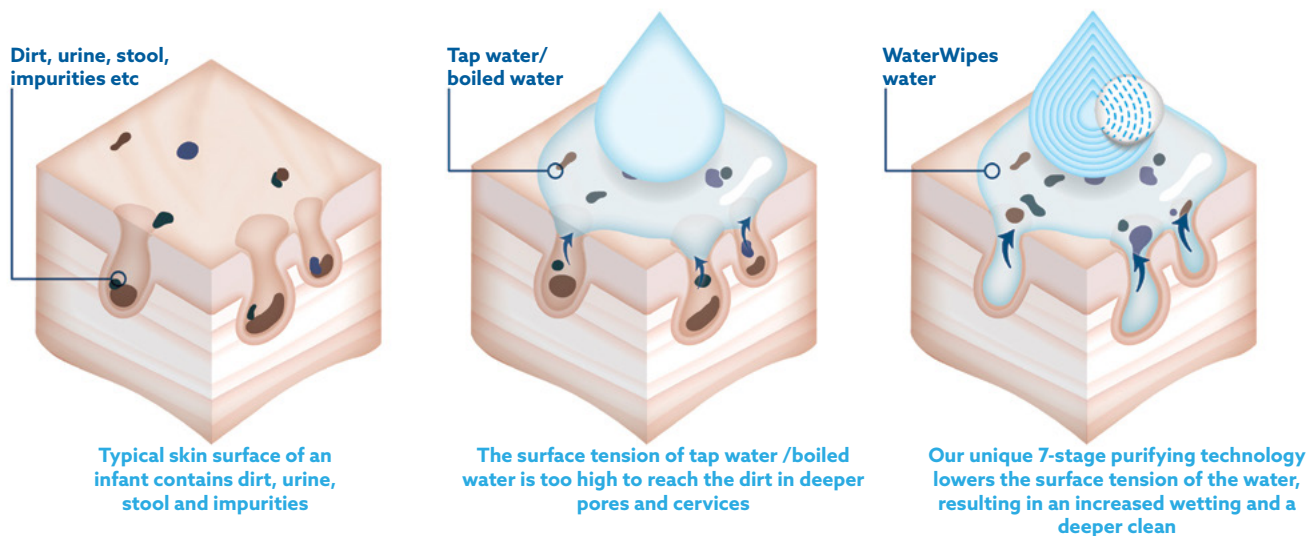
**Reduced severe diaper rash** incidence in premature babies by **over a third**

**Shortened duration of severe diaper rash** in premature babies by **more than half**



## WaterWipes lower surface tension for a deeper clean

WaterWipes unique water purifying technology lowers surface tension, resulting in increased wettability and access to more dirt and impurities, therefore providing a deeper and more effective clean and with just two ingredients.



## Recommended by healthcare professionals

- ♦ WaterWipes are highly recommended by nurses and other healthcare professionals and have become the preferred wipe for many Neonatal Intensive Care Units throughout the US, UK, Ireland, Portugal, Australia and New Zealand<sup>11</sup>
- ♦ 95% of US healthcare professionals said they recommend WaterWipes<sup>11</sup>

## Global accreditations

WaterWipes is the only baby wipe to hold numerous accreditations, sponsorships and registrations from global skin and allergy associations including:



Recommandé par l'AFPRAL  
(Association Française pour la Prévention des Allergies)



**They are the best. Any NAS or babies with GI issues automatically go onto WaterWipes. We wouldn't use anything else.**

Elizabeth M, NICU Nurse USA



**We use WaterWipes in our NICU because of the purity and gentleness of the product. We have babies in our unit from 22 weeks gestation to over 6 months and we use it for all of them.**

Sue B, Clinical Nurse Specialist USA



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## References

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11. WaterWipes® data on file.

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or visit [www.waterwipes.com](http://www.waterwipes.com)**