# **Dehydration Refractometer**



**Advanced On-Site Hydration Test** 

QUALITY ISO 9001 ENVIRONMENT ISO 14001 HEALTH & SAFETY









## Improve Hydration Safety

- Easy to use
- Fill, read result, then rinse
- Accurate results in seconds

### Monitoring Hydration Levels With The 'PAL10-S' Refractometer

Workplace hydration is a challenge all year round, so if you are thinking about measuring hydration in the workplace this high quality device should be considered.

The PAL-10S is a digital hand-held compact refractometer to measure urine S.G. quickly and efficiently and can be integrated into AOD & Worker Health programs.

To operate it, simply place a few drops of urine on the prism to cover it and press the "Start" key. Then, the urine S.G. value will be displayed on the LCD instantly.

Call today to get specifications and a price.

Call Today! 1300 79 70 30



### **Dehydration & Urine SG**

URINE SG READING	COMMENT	SUGGESTED ACTION
1.0000 – 1.0100	Below normal range	A. See details below
1.0101 – 1.0199	Within normal range	No action required
1.0200 – 1.0299	Above normal range	B. Moderate dehydration
1.0300 – 1.0349	Above normal range	C. Dehydrated
>1.0350	Abnormal	D. DANGER – seek medical assistance

Table 1 Urine Specific Gravity (SG) Values Chart.

#### **Abnormal Specific Gravity Values**

- A. Reduced Specific Gravity
  - Excess fluid intake (MODERATE YOUR FLUID INTAKE)
  - If persistently low SG seek medical advise
- B. Moderate Dehydration / Dehydrated (INSUFFICIENT FLUID INTAKE)
  - Onset of dehydration (INCREASE FLUID INTAKE IMMEDIATELY)
  - Continue to monitor and adjust accordingly
- C. Dehydrated (INSUFFICIENT FLUID INTAKE)
  - Dehydrated (INCREASE FLUID INTAKE IMMEDIATELY, MOVE TO SHADED COOL AREA TO REST)
  - Continue to monitor and adjust accordingly
- D. Severe Dehydration (SEEK IMMEDIATE MEDICAL ATTENTION)
  - Fluid intake continuous small doses
  - Vomiting/diarrhoea ensure electrolyte replacement
  - Symptoms may include:
    - Dizziness
    - Light-headedness
    - Lethargy
    - Confusion

Reference: http://www.nlm.nih.gov/medlineplus/ency/article/000982.htm

Dehydration means your body does not have as much water and fluids as it should. Dehydration can be caused by losing too much fluid, not drinking enough water or fluids, or both. Vomiting and diarrhoea are common causes.

Dehydration is classified as mild, moderate, or severe based on how much of the body's fluid is lost or not replenished. When severe, dehydration is a life-threatening emergency.

Ideally, urine specific gravity should be approximately 1.020 g/ml or below (Donoghue et al., 2000). The Royal College of Pathology, Australia considers a value of over 1.030 g/ml to indicate dehydration.

NOTE: THIS DOCUMENT IS INFORMATIVE ONLY. TO BE USED AS A BASIC GUIDE - IF IN DOUBT SEEK MEDICAL ASSISTANCE

