

PureProtect®

Total Hygiene Protection

FACT SHEET No. 24

Z O O N O - p H L E V E L

An integral part of the manufacture process for all “chemical products” is the publication of a covering Material Safety Data Sheets (MSDS) that identifies the composition of products in the finished product / the characteristics of the products / the handling requirements / any identified (potential) health hazards etc.

In effect, this MSDS is a “birth certificate” prepared by the manufacturer and written in support of the products that are produced on their premises. It is a legal requirement in most jurisdictions throughout the Western World.

A recent query has been raised why the Zoono Z71 MSDS advises that the pH level of Zoono is “unknown”. The reality is that the pH level of Zoono is written as “unknown” simply because it can fluctuate depending on ambient temperature and atmospheric.

The pH (Acidity / Alkalinity) of the product can be expected to be neutral (it is 98% ionised water) but it cannot be declared at pH 7 on the MSDS because this can vary - for example, the pH of pure water (H₂O) is 7 at 25°C but when exposed to the carbon dioxide (CO₂) in the atmosphere this change in equilibrium results in a pH of approximately 5.2. This is largely due to the association of pH with atmospheric and temperature.

Therefore, a product can be shipped from Chandler, Arizona with a pH of 7 and then be opened and re-tested in NZ or Australia (at a different ambient temperature) to register a pH of < 6 or even >7.

For these reasons, the MSDS states that it is “unknown” because it can vary (and is therefore – “unknown”). A product tested in Scandinavia will have a different pH to a product opened and tested in Auckland, Sydney, Singapore or Los Angeles – or even where it was manufactured in Chandler, Arizona.

If you are asked about pH levels of Zoono, just take the safest course of action and state the obvious – Zoono contains a high percentage of ionized water and is deemed to be “pH neutral”.

Feel free to circulate this Fact Sheet / Explanatory Note to customers if required.