

BIO-Z™

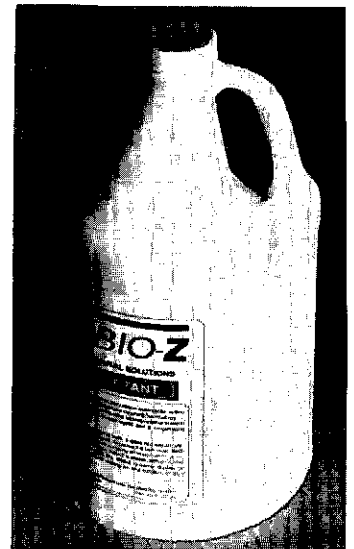
THE SAFE PRECISION CLEANING SOLUTION

A Safe, Powerful and Fast Precision Cleaner for Metals and Plastics

BIO-Z™ IS A LIQUID CONCENTRATE THAT PROVIDES FAST AQUEOUS CLEANING AND RINSING TO CLEAN ROOM STANDARDS WITH WORKER AND ENVIRONMENTAL SAFETY. IT IS MADE FROM PROCESSED KELP THAT IS STABLE AND NON-HAZARDOUS AND DOES NOT HAVE AN OFFENSIVE ODOR - MAKING IT USABLE IN OPEN WORK ENVIRONMENT

BIO-Z's™' Features Include:

- Fast ultrasonic cleaning to precision levels.
- pH 4.0 in solution for fast complete rinsing
- Does not etch or discolor sensitive metals or plastics
- Powerful enough to clean polishing compounds
- Low surface tension to clean small holes and openings
- Filterable to 0.2 microns for clean room applications
- Safe, no flash point, VOCs, or hazardous substances
- 100°F Low temperature cleaning



*BIO-Z Surfactant is available
in 1 gallon containers (above)
and 55 gallon drums.*

If you want to clean machining oils, polishing compounds, fingerprints, etc. quickly to precision levels **BIO-Z™** is an ideal solution. Surprisingly its low pH, which helps provide fast rinsing, does not cause etching or leaching of even sensitive materials such as aluminum or plastics. It's unique ability to break down the oil in the bath to harmless substances even simplifies disposal

Because **BIO-Z™** is made from kelp and other natural ingredients and has no volatile organic compounds it is environmentally and worker safe. Thus **BIO-Z™** is a long term solution which is not likely to be affected by future environmental or safety considerations.

BIO-Z™ surfactant is an organic formulation providing bio-active chelating and suspending processes for general cleaning and decontamination purposes. The chelating bio-activity helps remove scale and loosely adhering deposits in order to achieve a totally clean surface. This action is complimented by the suspending action which prevents the re-deposit of the contaminants, and this makes for the free rinsing feature. **BIO-Z™** has been shown, in published reports, to have 10 times higher cleaning results than Freon in less than 5 minutes total clean and rinse time.

BIO-Z™ is environmentally safe. It does not require special storage, disposal or removal because it is non-toxic and is able to break down most cooling and cutting oils to safe components. It is stable, with a long shelf life at normal room temperature storage. **BIO-Z™** is easily applied by spraying, brushing, or wiping on any surface, or as a dipping solution. Normal precision cleaning use is with 1:10 dilution for cleaning and 1:100 for rinsing with DI water and ultrasound.

SPECIFICATION

NOMINAL VALUES

SPECIFIC GRAVITY

0.95 gm/cc

SURFACE TENSION

27.2 d/cm @ 20°C

PH

3.0 @ 20°C

FEATURES

FLASH POINT

NONE

FUMING PROPERTIES

NONE

WATER SOLUBLE

YES

BIO DEGRADABLE

100%

VOCS' (EPA SW846-8260)

NONE

DISPOSAL METHOD

SEWER DISPOSAL*

CLEANING TEMPERATURE

90° to 110° F

*After suitable pH adjustment or other treatment as required by local regulations

Please contact **BIO-Z™** Division of IBI for further information
concerning your specific needs

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