## PlasClean

**CLINICAL DETERGENT** 

MEDICAL & DENTAL EQUIPMENT CLEANER FOR SENSITIVE MATERIALS



PlasClean® - the clinical detergent that effectively cleans the most sensitive materials including plastic and rubber.

### **CLEAN & PROTECT**

Applications include:

- > Dental Chairs
- > Podiatry Chairs
- > Treatment/Exam Beds
- > Operation Tables
- > Examination Lights
- > Medical Devices

PlasClean® is also ideal for:

- > Connectors, Lines & Tubes
- > Ophthalmic Equipment
- > Training Manikins
- > Respiratory Apparatus, such as Resuscitators, Masks, Pumps and Nebulisers.



















PRODUCT CODES:
5 Litre Container - PLC5
500 ml Office Dispenser - Spray Top (non misting) - PLC500T
500 ml Office Dispenser - Pour Top - PLC500P

PlasClean® is an exceptionally environmentally friendly product as it is formulated from advanced surfactants and sequestering agents that are made using renewable biological resources.



Compliant to the requirements of AS/NZS 4187 & AS/NZS 4815.



Marketed by:

Majac Medical Products Pty. Ltd.
Tel: 1300 138 578 • Int: +61 7 3265 6355
Email: sales@majacmedical.com.au
www.majacmedical.com.au



Also available from:



# Cleaning Sensitive Medical Equipment and Accessories **PLASTICS & VINYLS**

## Most clinics are concerned when cleaning their plastic instruments or equipment with various solutions.

This concern is magnified because certain Companies inform their representatives and Service Technicians to withdraw their warranty on apparatus & equipment should the clinic be using cleaning and disinfectant solutions other than their recommendations, which are usually a product that they sell.

The primary reason for cleaning Medical & Dental Equipment and is to remove the Bio-Burden from the surface prior to re-using.

Accurate information and procedures will maintain a safe working environment for both the staff and the patients by reducing the risk of cross infection.

These notes are designed to assist the Practice Management make an informed decision about the choice of products and procedures used in the practice, as opposed to being driven along by some of these unfounded and non-scientific allegations.

#### What causes cracking of plastics?

Environmental stress cracking (ESC) of plastics is a common and inevitable process that all hard plastics will undergo. ESC occurs particularly in hard brittle plastics at points where the plastic is under stress or load. These stress points include hinges, screw or rivet holes or where a load or stress is regularly applied. ESC occurs naturally with plastics over time however, different plastics vary dramatically in their susceptibility to ESC.

The majority of plastics used in the construction of quality devices are very resistant to ESC. On the other hand plastics such as polycarbonate and Perspex are very sensitive to ESC.

ESC can be accelerated by different stressing agents to include air (through oxidation of the polymer), light (particularly UV), physical pressure & heat.

Chemical agents can also accelerate ESC, but again different plastics vary dramatically in their susceptibility to these agents, for example, a susceptible plastic may be destroyed within minutes on contact with petrol yet another type of plastic that can be us used to store petrol in.

Perhaps the most aggressive of the chemical agents are the small molecular weight volatile solvents, with low water solubility. These tend to dissolve the plastic or insert between the polymer strands & disrupt the structure of the plastic thus weakening it & promoting ESC.

Other commonly encountered agents that can promote ESC are certain surfactants. However, there are hundreds if not thousands of different surfactants with individual structures and chemical properties to suit various applications. As would be expected surfactants range in their ability to promote ESC from very aggressive to almost no effect.

This generalization must also be taken in the light of variable plastic susceptibility as described above. In general quaternary ammonium surfactants (QATS) are recognised as agents that promote ESC particularly in sensitive plastics such as polycarbonates.

### Tips on cleaning

**Curing Lights:** Most Curing Lights generate heat and to assist reliability some manufacturers have modified the microchip in the unit to withstand the heat. Because of the increased ability of the chip to resist heat this suggests that the operator can perform 'back to back' procedures with peak performance. However, the plastic on the body of the unit has residual heat and therefore should not be cleaned with any solution until it cools, the sudden cooling can fatigue the plastic, as will the heat in the first place and then degenerate the plastic body.

Usually the Supplier blames the Cleaning Solution (to avoid warranty claim), and the user will blame the unit, the solution or both when the culprit is potentially lack of information.

**OR and Dental Lights:** As with the Curing Lights, allow to cool before cleaning. Then clean with a clinical detergent and wipe dry with a lint free disposable wipe. It is important to dry surfaces with a clean dry cloth so that all residues of soil and the cleaning agent itself are removed.

**Examination Beds, OR Tables, Dental & Podiatry Chairs:** Wash and dry with a Clinical Detergent, as recommended, avoid cleaning with disinfectants. Once again wet with a Clinical Detergent and dry with a disposable lint free wipe.



