

## *THE Medical Foam*

**PLASTAZOTE** is acknowledged as the most cited thermoplastic material in medical literature. It has become the industry standard closed-cell, cross-link polyethylene foam over the past forty years. The material is used extensively in a wide variety of medical and health care applications, many of which involve direct skin contact.



Where a more resilient 'softer feel' is required, **EVAZOTE** is often the material of choice.

**Latex-free, non-toxic and hypoallergenic**, the use of PLASTAZOTE and EVAZOTE foams reduces skin irritation. These foams are also X-ray, CT and MRI lucent making them ideal for a range of splint and support applications as well as MRI vests.

### **Packaging**

The regular cell size of PLASTAZOTE and EVAZOTE foams makes them highly energy absorbent... ideal materials for protective packaging. They are inert, lightweight, UV stable, flexible, tough and resilient and exhibit outstanding resistance to chemicals and water. They are highly pure, will not cause corrosion or staining and are safe to use for the transit and archival storage of medical components and equipment.

### **Prosthetics**

The ease with which AZOTE foams can be cut to shape or molded, their low weight and non-irritant properties makes them a natural prosthetic material. PLASTAZOTE is well established as a lightweight cosmetic cover for upper and lower limb prostheses.

### **Podiatric - Diabetic Footwear**

For disorders of the foot such as Pes Planus (flat feet) Plantar Fasciitis (fallen arches) Pes Cavus (high arches) and Hallux Valgus (bunion) the selective use of a range of AZOTE foam densities is used to provide extra support. An accurate impression of the plantar surface of the foot can be obtained by placing the foot on a piece of preheated PLASTAZOTE and applying the full body weight. Much orthopedic footwear also depends on the lightweight pliant, shock absorbing nature of AZOTE foam.

### **Orthoses: braces, splints, collars, immobilizers & support pads**

The technique of 'molding to body' was established using PLASTAZOTE foam and can be used in the production of bespoke joint supports. Cervical collars and immobilizing orthoses, spinal supports and splints may all benefit from the use of PLASTAZOTE. High density grades of PLASTAZOTE allow splints to be made lightweight but rigid.

### **Miscellaneous: utensils, buoyancy aids, pads, seats, cushions**

From protection helmets to hydrotherapy equipment, exercise mats to lightweight implement handles, comfort linings to wheelchair ramps; the healthcare uses for AZOTE foams are extensive and varied.

# zotefoams inc

## Benefits

- Pure and non-staining
- Non-toxic and safe – no outgassing
- Extremely low odor
- Safe for skin contact
- Good impact absorbing properties
- Lightweight, yet durable
- Consistent with regular cell size
- Low in-built stress levels
- Good surface protection characteristics
- Wide range of densities and colors

Plus, Zotefoams has tested our foams against several different international standards for Cytotoxicity and applicability for Medical use and skin contact. A summary of some of the products and standards are listed below.

Product Family	Density Ranges	Colors	ISO 10993	US Pharmacopoeia 661 Monograph Testing
Plastazote LD	15 - 70	White, Black, Grey, Medical Pink	Parts 1*, 5*†, 10* and 18* *LD45 Pink †LD45 Pink & White, LD24 White	Fully Compliant
Plastazote HD	30 - 115	White, Black	Part 18, Part 5† †HD115 White and Black	Fully Compliant
Plastazote PK	20 - 80	Silver Grey	Part 18	Fully Compliant
Evazote EV	30 - 50	White, Black, Grey, Medical Pink	Part 18, Part 5† †EV50 White	Fully Compliant
Evazote VA	25 - 80	White, Black, Grey	Part 18, Part 5† †VA35 White	Fully Compliant
Supazote EM	45	Black	Part 18	Fully Compliant

Note: This may not be a complete list. Additional Technical Information and Product Specification Data are available on request.

The Zotefoams difference in purity makes our foams ideal for other stringent applications beyond those listed above in medical environments. Zotefoams has also tested our foams against different international standards for Potable Water, Textiles and for Food contact. See the Chart below.

Product Family	Density Ranges	Colors	Potable Water BS6920 Standard	Oekotex Textile Standard Class 1	US FDA 21 CFR
Plastazote LD	15 - 70	White, Black	Pass for Contact All Densities up to 50°C LD70 Black up to 85°	Fully Compliant	177.1520 *White, Blue, Pink Only – All densities
Plastazote HD	30 - 115	White, Black	Pass for Contact All Densities up to 85°C	Not Tested	177.1520 *White Only – All densities
Evazote EV	30 - 50	White, Black	Pass for Contact All Densities up to 85°C	Fully Compliant	
Evazote VA	25 - 80	White, Black	Pass for Contact All Densities up to 85°C	Fully Compliant	177.1350 *White Only – All densities
Supazote EM	26	White	Not Tested	Not Tested	177.1340 *White Only

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