



Expect Service

Radiation Products Design Inc

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## INSTRUCTIONS

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### RPD INFORMATION

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### RPD PRODUCT INFORMATION

<b>Item Number</b>	<b>Description</b>
486-970	Elasto-Gel, 0.5cm thick, 30 x 30 cm
486-971	Elasto-Gel, 1.0cm thick, 30 x 30 cm
486-979	Elasto-Gel, 0.3cm thick, 20 x 40 cm
486-980	Elasto-Gel, 0.5cm thick, 20 x 40 cm
486-981	Elasto-Gel, 1.0cm thick, 20 x 40 cm

## INTRODUCTION

Elasto-Gel™ has been reported to be an excellent bolus material. It has many desirable properties that make it suitable for use in this application. F. Chang. et al, from the North Shore Medical Center (FL) reported in his pre-published paper in 1989, "The requirement of an ideal bolus material has been suggested by Moyer, et al, as: We believe it should meet the following criteria:

- a) It has tissue equivalent properties
- b) It is made of safe materials approved by FDA
- c) It is flexible enough to have good contact with the skin surface
- d) It is transparent enough that the skin mark can still be seen
- e) It is convenient to be used daily and preferable available in commercial packages.
- f) It is not much affected in properties and appearance after high doses of radiation."

Elasto-Gel™ satisfies the criteria mentioned above with a small price tag when compared with the other bolus materials on the market at the present time.

More recently, K. McCullough, M.D. from the Mayo Clinic (Rochester, MN) reported the results of his work with Elasto-Gel™ as a bolus material at the International Convention in Canada (July 1992) and confirmed the results of Dr. Chang.

Bolus materials are frequently used in high energy radiation therapy in order to deliver the prescribed dose to the patient skin surface. Elasto-Gel™ is easy to work with, reusable on the same patient, is mildly adhesive, and conforms exceptionally well to body contours. It may be easily cut with scissors to the desired size and shape. Standard backing is stretch cloth on one side and clear removable plastic on the other. The stretch cloth backing may be removed by first moistening with a damp cloth or cotton swab and then peeling the cloth from the gel.

## REFERENCES

1. Private communications (1989)
2. Moyer, R.F., McElroy, W.R., O'Brien, J.E., Chamberlanin, C.C.: "A surface Elasto-Gel™ Material for High-energy Photon and Electron Therapy", RADIOLOGY, VOL. 146, #2: pages 531-532, 1983
3. McCullough, K., M.D., et al, Canada, Poster Presentation, July 1992
4. Chang, FI, PhD, Benson, K. RTT, Share, F., M.D., "Study of Elasto-Gel™ Pads Used As Surface Elasto-Gel Material in High Energy Photon and Electron Therapy." INT. J. RADIATION ONCOLOGY BIOLOGY PHYSICIAN, VOL. 22, PAGES 191-193.

## FEATURES

Elasto-Gel™ bolus material has many advantages over the dry powder mixture:

- Elasto-Gel™ is non-flowing gel, which has been tested to show that it is essentially "tissue equivalent."
- Elasto-Gel™ is very flexible and can be "molded" to fit the contours of the body.
- Elasto-Gel™ is mildly adhesive. It will stay in place, but may be easily removed and reapplied or repositioned on the same patient many times.
- To assist in shaping and fitting complex areas Elasto-Gel™ may be cut with a scissors, or the dressing can be layered to give additional thickness.

The chances for radiation reactions are significantly minimized because Elasto-Gel™ is adhesive and does not flow.

## DIRECTIONS FOR USE

After selecting the desired thickness, remove it from the package and cut to the desired shape and size. The patient is prepared by marking the area where the bolus needs to be applied. The clear plastic cover is removed from one side of the Elasto-Gel™ material and is applied to the predetermined area. Additional layers of Elasto-Gel™ are added as required. The patient is

than treated and the Elasto-Gel™ removed. The clear plastic film is replaced on the Elasto-Gel™ surface and the bolus unit is carefully put into an appropriate container, such as a re-sealable plastic bag. The bolus unit should be stored with its detailed instructions and drawings of how and where to position the product on the patient, in a suitable storage file. The bolus unit is then easily reused by retrieving it from the file, then removing it from the storage container, removing the clear plastic film and again applying it to the patient. Should the bolus material become soiled, the surface may be swabbed with a cotton or gauze moistened with water or a disinfectant solution.

**Note:** The bolus unit may be reused on the same patient, but it is recommended that new material be used for each patient.

## SPECIFICATIONS

**Density:**  $1.20 \text{ gm/cm}^3$

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