# PH-18 Stomach Phantom BMU-1

**Instruction Manual** 



■This stomach phantom is designed to assess the protocols and detectors for double contrast gastrography.

#### **■**Feature

The phantom material is human tissue substitute for radiography. Specific gravity of the material is 1.06(JIS K6301, 7112), allowing radiography with the same setting as human body.

- Elementary composition (Wt%)

H: 8.41 C: 72.25 N: 4.61 O: 14.73

- Electron density  $3.45(\times 1023/\text{cm})$
- Effective atomic number 6.10

## **■**Set Includes

- -Phantom body: Elliptical pillar shape that simulates human body.
- -Stomach: Distended stomach is represented. Early stomach cancer is made on the stomach wall.
- Spinal region: thoracic vertebrae 9th to 12th, lumbar vertebrae first to 5th is embedded.

## ■ Preparations

Opening the screw plug on the top of the phantom, and pour approx. 70 ml of barium solution.

Ensure that the screw plugs on the top and the side of the phantom are firmly fastened. Then, lifted the phantom and dragging to verticals, left and right so that barium solution spreads over entire stomach lining.

After uniformly coating the stomach lining with barium solution, position the phantom so that remaining solution gathers in the bottom of the stomach. Then radiograph the phantom. Be sure to set the bed to horizontal position.

Radiography setting for the phantom is to be the same as for the patients.

#### ■After use

After use, quickly drain the barium solution. Then rinse the inside of the phantom with running water until clear water flows out from the phantom.

Wipe the barium solution and water off the phantom body. Replace the screw plugs and store the phantom.

# **Precautions**

- -Although the phantom is made of urethanes resin with some elasticity, fall of the phantom may lead to breakages or cracks. Please handle the phantom with utmost care.
- The phantom is heavy. Pay attention to your own safety when handling.
- Use mild detergent to remove dirt on the phantom surface. Do not use organic solvent as this may damage the phantom materials.
- When not in use, store the phantom in the storage case.

## Phantom materials

Due to the characteristic of the material, the phantom contains some air bubbles.

Materials: Phantom body and stomach; urethanes resin

Spine; epoxy resin

Dimensions:  $300 \times 200 \times 330 \text{ mm}$ 

Weight: approx. 16 Kg