

Product Testing Solutions

Artificial Urine / Other

Artificial Urine for Corrosion Testing of Urological Implants, Stabilized

This artificial urine is designed for testing metallic biomaterials used to produce urological implants and catheters. This convenient product is a ready to use solution. The formulation contains non-toxic preservative to avoid bacteria growth and can be stored at room temperature. The pH of the final solution is 6.0+/- 0.4.

(Custom formulations are also available)

DIN EN 1616:1999 Artificial Urine

For Testing Sterile Urethral Catheters

Artificial Urine is prepared according to DIN EN 1616:1999 standard procedure. DIN EN 1616 specifies the method to test sterile urethral catheters. This ready-to-use solution should be stored frozen to avoid bacteria growth. The pH of the solution is 6.6.

Artificial Urine Medium for Growing Urological Pathogens

This ready-to-use solution closely resembles composition of human urine and can be used for clinical studies as well as for product testing. This formulation supports growth of wide range of urinary pathogens and it is also capable of forming crystals similar to these found in natural urinary tract infections. It can be used as negative controls in laboratory testing. The pH of the Artificial Urine Medium is 6.5. This product is stored frozen.

Artificial Urine Stabilized

This ready-to-use solution has the same composition as Artificial Urine Medium and closely resembles human urine. This formulation contains non-toxic preservative to avoid bacteria growth and can be stored at room temperature. The pH of Artificial Urine Stabilized is 6.5.

Artificial Urine	
Catalog No.	Description
1700-0016	Artificial Urine for Corrosion Testing of Urological Implants, Stabilized, each (200 mL/bottle)
1700-0017	Artificial Urine, DIN EN 1616:1999, Not Stabilized, each (200 mL/bottle)
1700-0018	Artificial Urine Medium for Growing Urological Pathogens, Not Stabilized, each (200 mL/bottle)
1700-0558	Artificial Urine, DIN EN 1616:1999, Stabilized, each (200 mL/bottle)

Artificial Urine (Continued)	
Catalog No.	Description
1700-0600	Artificial Urine, Stabilized, each (200 mL/bottle)
1700-0602	Artificial Urine, Stabilized, each (950 mL/bottle)
1700-0603	Artificial Urine, DIN EN 1616:1999, Not Stabilized, each (19.8 L)

Simulated Lung Fluid

Gamble's solution represents the interstitial fluid deep within the lung and is used to simulate different lung conditions. It is used in pulmonary drug delivery studies as well as in studies of particles inhalation effects. Citrate is used in Gamble's solution instead of proteins to avoid foaming and acetate instead of organic acids. Gamble's solution has a pH of 7.4. Inquire about other simulated lung fluid formulations.

Simulated Lung Fluid	
Catalog No.	Description
1700-0800	Gamble's Simulated Lung Fluid, Not Stabilized, each (200 mL/bottle)

Artificial Cerumen "Earwax"

Cerumen, also known as earwax, is a waxy substance secreted in the ear canal that protects and lubricates the ear canal and assists in cleaning by trapping dirt and dead skin cells. Pickering Laboratories offers artificial earwax that can be used for the testing of hearing aids, ear buds and other electronic devices meant to be used in the ears.

Artificial Cerumen "Earwax"	
Catalog No.	Description
1700-0701	Artificial Cerumen, Not Stabilized, each (50 g/bottle)
1700-0711	Artificial Cerumen, Not Stabilized, each (200 g/bottle)

Substitute Ocean Water

Substitute Ocean Water is prepared according to official ASTM method D1141-98. This product could be successfully used in a wide variety of tests where solution simulating sea water is required, such as oil contamination testing, detergent evaluation and corrosion testing. The pH of the solution is 8.2.

The solution is ready-to-use and is stored at room temperature. Inquire about different sizes.

Substitute Ocean Water	
Catalog No.	Description
1700-0801	Substitute Ocean Water, ASTM D1141-98 (2003), Not Stabilized, case of 4 (950 mL/bottle)
1700-0802	Substitute Ocean Water, ASTM D1141-98 (2003), Stabilized case of 4 (950 mL/bottle)
1700-0803	Substitute Ocean Water, ASTM D1141-98 (2003), Stabilized, each (200 mL/bottle)

General Terms & Conditions

Synthetic Hard Water

Hard Water for product testing and dispersibility testing. Made according to ASTM E1945-02.

Synthetic Hard Water	
Catalog No.	Description
1700-0804	Synthetic Hard Water, Custom Hardness, ASTM E1945-02, each (200 mL/bottle)

1 Controlling Document

These T & C's and only these T & C's apply to all goods sold and services provided by Seller to Buyer. By the placement of Buyer's purchase order, Buyer consents to these T & C's and no others.

2 Terms of Payment

All payments are due and payable thirty (30) days from the date of the invoice. A service charge of 1 1/2 % per month shall apply to all invoices not paid within 30 days.

3 Security Agreement

- (a) As security for Buyer's payment, Buyer grants Seller a purchase money security interest in the specific goods for which payment is due. Seller has the right to file a financing statement evidencing this security interest.
- (b) This security interest shall terminate upon receipt by Seller of payment for the specific goods.

4 Delivery, Title and Risk of Loss

Title to goods and risk of loss of goods shall pass to Buyer when Seller delivers such goods to a common carrier or Buyer's agent. Delivery shall be EX Works Seller's Factory. Delivery dates agreed to by Seller are approximate only. Seller shall not be liable for, nor shall Seller be in breach of its obligations to the Buyer because of any delivery made within a reasonable time after the stated delivery date. Seller may, by written notice to Buyer, change any delivery date, and such date shall become the agreed upon delivery date unless Buyer objects to such date in writing delivered to Seller within ten (10) days of receipt of Seller's notice.

5 Force Majeure

Seller shall not be liable for any failure to deliver, or delay in the delivery of, any goods or services due to any cause beyond its control, including but not limited to natural phenomena, government actions, fires, labor disputes, or inability to obtain components, energy, materials, manufacturing facilities, or transportation. In the event of such delay, the date of delivery or performance hereunder shall be extended by a period equal to the time lost by reason of such delay. In the event Seller's production is curtailed for any of the above reasons, Seller may allocate its production to its various Buyers.

6 Seller's Liability

If Buyer notifies Seller within 30 days after the date of invoice of a claimed defect, Buyer shall concurrently offer Seller an opportunity to investigate the claim and to inspect allegedly defective goods. Failure to offer Seller such opportunity shall constitute acceptance by Buyer and a waiver of all claims for defects. If Seller determines that Buyer's claim is valid, Seller may repair the defective goods or replace the defective goods with conforming goods at the Seller's Factory. Replacement of defective goods will only be made upon return of the defective product.

7 Seller's Remedies

If Buyer fails, with or without cause, to furnish Seller with specifications and/or instructions for, or refuses to accept deliveries of, any of the products sold under this contract, or is otherwise in default under or repudiates this contract or any other contract with Seller or fails to pay when due any invoice under this contract, then in addition to any and all remedies allowed by law, Seller without notice (1) may deter shipment under this or any other contract between Buyer and Seller until such default, breach or repudiation is removed and/or (2) may cancel any undelivered portion of this and/or any other contract in whole or in part, Buyer remaining liable for damages.

8 Patent Indemnity

(a) Seller shall, at its own expense, defend any suit that is instituted against Buyer to the extent such suit alleges that any goods, other than prototypes, or any part thereof sold or leased hereunder infringes on any United States patent, trademark, or copyright (except goods covered by Section 8(b) below), provided that such alleged infringement does not arise from any modification or addition to the goods by anyone other than Seller, or the use of such goods as a part of or in combination with any other device or parts or from the use of such goods to practice any method or process. Provided further that the Buyer gives Seller immediate notice in writing of any such suit and permits Seller, through counsel of its choice, to answer the charge of infringement and defend such suit; and the Buyer gives Seller all the needed information, assistance, and authority, at Seller's expense, to enable Seller to defend or settle such suit. In the case of a final award of damages in any such suit, Seller shall pay such award but shall not be responsible for any settlement made without its prior written consent. In the event the use, lease, or sale of the goods is enjoined, Seller may at its own option and expense: (1) procure for Buyer the right to use, lease, or sell such goods, (2) replace such goods, (3) modify such goods, or (4) remove such goods and refund the purchase price paid by Buyer less a reasonable sum for use, damage, and obsolescence. THIS SECTION STATES SELLER'S TOTAL RESPONSIBILITY AND LIABILITY, AND THE BUYER'S SOLE REMEDY FOR ANY ACTUAL OR ALLEGED INFRINGEMENT OF ANY PATENT, TRADEMARK, OR COPYRIGHT BY ANY GOODS DELIVERED HEREUNDER OR ANY PART THEREOF. THIS SECTION 8 IS IN LIEU OF AND REPLACES ANY OTHER EXPRESS, IMPLIED OR STATUTORY WARRANTY AGAINST INFRINGEMENT.

(b) The Buyer shall, at its own expense, indemnify and hold Seller harmless from and against any expense or loss resulting from any infringement of any patent, trademark, or copyright arising as a result of Seller's compliance with any of the Buyer's designs, specifications, or instructions, and shall defend at its own expense including attorney fees, any suit brought against Seller alleging any such infringements provided that Seller (i) gives the Buyer immediate notice of any such suit and permits the Buyer through counsel of its choice, to defend such suit, and (ii) gives Buyer all needed information, assistance, and authority, at the Buyer's expense, necessary for the Buyer to defend any such suit.