

Cleaning and Disinfection Procedures for Food Hoses



CLEANING AND DESINFECTION PROCEDURES FOR FOOD HOSES

CLEANING

1) Rinse hose with hot water or detergent solution for 20 minutes.

Optimum temperature +50°C to +65°C; it must be higher than +43°C. This procedure will remove the food residuals.

2) If you clean the hose with a detergent solution you must rinse the hose a second time with water to remove all residuals of the detergent.

Please choose the lowest concentration if you clean the hose more than once.

The optimum temperature is +50° to 65°C.

For more information please contact us.

DISINFECTING

IPL recommends the chemical disinfection for pharmaceutical and food hoses

Treatment for 20 minutes with Nitric acid (HN03) or a product with additional nitric acid at a maximum concentration: 0.1% at 75°C - 3% at room temperature.

Treatment for 20 minutes with Chlorine (Cl) or a product with additional Chlorine at a maximum concentration: 1% at 65°C

Treatment for 20minutes with Sodium Hydroxide (NaOH) or a product with additional sodium hydroxide at a maximum concentration: 2% at 55°C to 75°C - 5% at room temperature.

The choice of disinfection procedure depends on the microbic product contamination and on the type of appliance.

After chemical treatment the hose must be rinsed with drinking water for at least 30 minutes.

Cleaning and Sterilization Procedures for Pharma Hoses



CLEANING AND STERILIZATION PROCEDURES FOR PHARMA HOSES

Introduction

The validation of the sterilization process of the pharma line hoses and tubing is responsibility of the users. Test should always be carried in order to verify if cleaning process may or may not alterate performance of the hoses. In general terms the Pharma-Ilme hose may be cleaned with the following processes:

Autoclave or Steam Sterilization

The pharma line hoses and tubing may be sterilized by steam in autoclave. The hoses can sustain a standard cycle (30 mins at 121°C, at a pressure of 1 bar or 5-7 mins at 134°C, at a pressure of 2,1 bar).

Gamma Radiation Sterilization

Gamma radiations sterilization (up to 2,5 Mrad) do not adversely impact physical features of the hoses such as durometer, elongation, tear strength etc, nor performance capabilities however repeated cycles of gamma sterilization may in case of higher doses or radiation change the physical properties of the elastomer used, testing should always be conducted in such cases.

Ethylene Oxide Sterilization

The pharma line hoses may be sterilized with Ethylene Oxide (ETO) with no degradation of physical properties. Please always assure that sufficient time is allowed for complete outgassing of residual ETO and ETO by-products.

PROPERTIES OF IPL PHARMACEUTICAL HOSES							
	PHARMA PRESS HA 01	PHARMA STEEL HS 01	PHARMA PRESS HT HH 01	PHARMA STEEL PRESS HT HT 01	PLUTONE PU PRESS PN 01	PLUTONE PU PRESS AS PN 02	PHARMASIL/TPU PI 01
STERILIZATION WITH							
ETHYLENE OXIDE GAS (ETO)	YES	YES	YES	YES	YES	YES	YES
STEAM AT 121°C ¹⁾	YES	YES	YES	YES	NO	NO	NO
STEAM AT 134°C ¹⁾	NO	NO	YES	YES	NO	NO	NO
GAMMA RADIATION ²⁾	YES	YES	YES	YES	YES	YES	YES
ELECTRON BEAM	YES	YES	YES	YES	YES	YES	YES
HOT AIR ³⁾	NO	NO	NO	NO	NO	NO	NO
COMPLIANCE WITH REGULATION FOR FOOD CONTACT AND PHARMACEUTICAL PRODUCTS							
EUROPEAN DIRECTIVE 2002/72/CEE AS EMENDED, CE REGULATION N° 1935/2004	YES	YES	YES	YES	YES	YES	YES
FOR-CFR 2 PARTS 170-199	YES	YES	YES	YES	YES	YES	YES
USP XXXII ED, 2009 PAR. 88 CLASS VI	YES	YES	YES	YES	YES	YES	YES
ISO 10993-10:2002/AMD 1:2006	YES	YES	YES	YES	YES	YES	YES
ISO 10993-11:2006	YES	YES	YES	YES	YES	YES	YES

Note:

- 1) The standard method in autoclave is 121°C (1,1 bar) for 15-20 min or 134°C (2,1 bar) for 5-7 min (see also EN 554, EN556). The number of sterilization cycles which a pharmaceutical hose can withstand depends on various factors, such as service conditions, presence of mechanical stress etc.
- 2) As a rule, a radiation dose of < 25 KGy (< 2,5 Mrad) is sufficient for sterilisation. In the SI system the Unit is Gray (1 Gy = 100 rad), Rad is a old unit (Radiation Absorbed Dose).
- 3) It is normally made at 160°C for one hour or 180°C for 30 min.
- 4) It is also available in antistatic version, info on request.