

# USP Endotoxin Limits for Common Injectables

(Use Acrobat Bookmarks to Navigate)

<u>Product name</u>	<u>Endotoxin Limit</u>	<u>Endotoxin Limit 2 (where applicable)</u>	<u>Endotoxin Limit 3 (where applicable)</u>
<b>A</b>			
Acetazolamide for Injection	0.5 EU/mg		
Acetic Acid Irrigation	0.5 EU/ml		
Acylovir for Injection	0.174 EU/mg		
Adenosine Injection	11.62 EU/mg for rapid intravenous injection	5.95 EU/mg for continuous peripheral intravenous infusion	
Alcohol in Dextrose Injection	0.5 EU/ml		
Alfentanil Injection	10 EU/ml		
Alprostadil Injection	5 EU/100ug		
Alteplase	1 EU/mg		
Alteplase for Injection	1 EU/mg		
Amifostine for Injection	0.2 EU/mg		
Amikacin Sulfate Injection	0.33 EU/mg		
Aminocaproic Acid Injection	0.05 EU/mg		
Aminohippurate Sodium Injection	0.04 EU/mg		
Aminopentamide Sulfate Injection	25 EU/mg		
Aminophylline Injection	1 EU/mg		
Ammonia <sup>13</sup> N Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)		
Ammonium Chloride Injection	1.72 EU/ mEq of chloride		
Amobarbital Sodium	0.4 EU/mg		
Amobarbital Sodium for Injection	0.4 EU/mg		
Amoxicillin	0.25 EU/mg		
Amoxicillin for Injectable Suspension	0.25 EU/mg		
Amphotericin B for Injection	5 EU/mg for parenterals	0.9 EU/mg for intrathecals	
Ampicillin	0.15 EU/mg		
Ampicillin and Sulbactam for Injection	0.17 EU / (1mg of mix of amp & sulb - 0.67 and 0.33 mg, respectively)		
Ampicillin for Injectable Suspension	0.15 EU/mg		
Ampicillin for Injection	0.15 EU/mg		

Ampicillin Sodium	0.15 EU/mg if labeled sterile or processed into injectable
Anileridine Injection	7.2 EU/mg
Anticoagulant Citrate Dextrose Solution	5.56 EU/ml
Anticoagulant Citrate Phosphate Dextrose Adenine Solution	5.56 EU/ml
Anticoagulant Citrate Phosphate Dextrose Solution	5.56 EU/ml
Anticoagulant Heparin Solution	2.5 EU/ml
Anticoagulant Sodium Citrate Solution	5.56 EU/ml
Arginine Hydrochloride Injection	0.01 EU/mg
Ascorbic Acid Injection	1.2 EU/mg
Atenolol Injection	33.3 EU/mg
Atracurium Besylate Injection	5.56 EU/ml
Atropine Sulfate Injection	55.6 EU/ml
Azathioprine Sodium for Injection	1 EU/mg of azathioprine
Aztreonam	0.17 EU/mg if labeled sterile or processed into injectable
Aztreonam for Injection	0.17 EU/mg

## B

Bacitracin	0.01 EU / Bacitracin Unit if labeled sterile or processed into injectable
Bacitracin for Injection	0.01 EU / Bacitracin Unit
Bacteriostatic Sodium Chloride Injection	1 EU/ml
Bacteriostatic Water for Injection	0.5 EU/ml
Benztropine Mesylate Injection	55.6 EU/mg
Benzylpenicilloyl Polylysine Injection	5833 EU/ml
Betamethasone Sodium Phosphate and Betamethasone Acetate Injectable Suspension	29.2 EU/mg Betamethasone
Betamethasone Sodium Phosphate Injection	29.2 EU/mg Betamethasone
Bethanechol Chloride Injection	25 EU/mg
Biperiden Lactate Injection	83.3 EU/mg
Bleomycin for Injection	10EU/Bleomycin Unit

Bleomycin Sulfate	10EU/Bleomycin Unit
Bretylium Tosylate in Dextrose Injection	0.2 EU/mg Bretylium Tosylate
Bretylium Tosylate Injection	0.2 EU/mg
Brompheniramine Maleate Injection	35.7 EU/mg
Bumetanide Injection	350 EU/mg
Bupivacaine Hydrochloride and Epinephrine Injection	1.6 Eu/mg Bupivacaine Hydrochloride
Bupivacaine Hydrochloride in Dextrose Injection	1.8 EU/mg Bupivacaine Hydrochloride
Bupivacaine Hydrochloride Injection	2.5 EU/mg
Butorphanol Tartrate Injection	88 EU/ mg

## C

Caffeine and Sodium Benzoate Injection	0.7 EU/mg
Calcium Chloride Injection	0.2 EU/mg
Calcium Gluceptate Injection	0.32 EU/mg
Calcium Gluconate Injection	0.17 EU/mg
Calcium Levulinate Injection	35.7 EU/mg
Capreomycin for Injection	.35 EU/mg
Capreomycin Sulfate	.35 EU/mg
Carbenicillin Disodium	0.05 EU/mg Carbenicillin
Carbenicillin for Injection	0.05 EU/mg
Carboplatin for Injection	0.54 EU/mg
Carboprost Tromethamine Injection	714.3 EU/mg
Cefamandole Nafate	0.15 EU/mg Cefamandole
Cefamandole Nafate for Injection	0.15 EU/mg Cefamandole
Cefazolin for Injection	0.15 EU/mg
Cefazolin Injection	0.15 EU/mg
Cefazolin Sodium	0.15 EU/mg
Cefepime for Injection	0.06 EU/mg
Cefepime Hydrochloride	0.04 EU/mg if labeled sterile or processed into injectable
Cefmetazole for Injection	0.2 EU/mg
Cefmetazole Injection	0.2 EU/mg
Cefmetazole Sodium	0.2 EU/mg
Cefonicid for Injection	0.35 EU/mg
Cefonicid Sodium	0.35 EU/mg
Cefoperazone for Injection	0.2 EU/mg
Cefoperazone Injection	0.2 EU/mg

Cefoperazone Sodium	0.2 EU/mg
Ceforanide	0.25 EU/mg if labeled sterile or processed into injectable
Ceforanide for Injection	0.25 EU/mg
Cefotaxime for Injection	0.2 EU/mg
Cefotaxime Injection	0.2 EU/mg
Cefotetan	0.17 EU/mg if labeled sterile or processed into injectable
Cefotetan Disodium	0.17 EU/mg if labeled sterile or processed into injectable
Cefotetan for Injection	0.17 EU/mg
Cefotetan Injection	0.17 EU/mg
Cefoxitin for Injection	0.13 EU/mg
Cefoxitin Injection	0.13 EU/mg
Cefoxitin Sodium	0.13 EU/mg if labeled sterile or processed into injectable
Ceftazidime	0.1 EU/mg if labeled sterile or processed into injectable
Ceftazidime for Injection	0.1 EU/mg
Ceftizoxime for Injection	0.1 EU/mg
Ceftizoxime Injection	0.1 EU/mg
Ceftizoxime Sodium	0.1 EU/mg if labeled sterile or processed into injectable
Ceftriaxone for Injection	0.2 EU/mg
Ceftriaxone Injection	0.2 EU/mg
Ceftriaxone Sodium	0.2 EU/mg if labeled sterile or processed into injectable
Cefuroxime for Injection	0.1 EU/mg
Cefuroxime Injection	0.1 EU/mg
Cefuroxime Sodium	0.1 EU/mg if labeled sterile or processed into injectable
Cephalothin for Injection	0.13 EU/mg
Cephalothin Injection	0.13 EU/mg
Cephalothin Sodium	0.13 EU/mg if labeled sterile or processed into injectable
Cephapirin for Injection	0.17 EU/mg
Cephapirin Sodium	0.17 EU/mg if labeled sterile or processed into injectable
Cephradine	0.2 EU/mg if labeled sterile or processed into injectable
Cephradine for Injection	0.2 EU/mg
Chloramphenicol	0.2 EU/mg if used in injectable dosage form
Chloramphenicol Injection	0.2 EU/mg

Chloramphenicol Sodium Succinate	0.2 EU/mg of chloramphenicol if labeled sterile or processed into injectable
Chloramphenicol Sodium Succinate for Injection	0.2 EU/mg of chloramphenicol
Chlordiazepoxide Hydrochloride for Injection	3.57 EU/mg
Chloroquine Hydrochloride Injection	0.7 EU/mg
Chlorothiazide Sodium for Injection	0.3 EU/mg
Chlorpheniramine Maleate Injection	8.8 EU/mg
Chlorpromazine Hydrochloride Injection	6.9 EU/mg
Chorionic Gonadotropin	0.03 EU / USP Chorionic Gonadotropin Unit
Chorionic Gonadotropin for Injection	0.03 EU / USP Chorionic Gonadotropin Unit
Chromic Chloride Injection	16.7 EU/ug of chromium
Chromic Phosphate <sup>32</sup> P Suspension	175/V EU/ml (V = max. total dose in ml at the expiration time)
Chromium Cr 51 Eddetate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Cilastatin Sodium	0.17 EU/mg of cilastatin if labeled sterile
Cimetidine in Sodium Chloride Injection	0.5 EU/mg of cimetidine hydrochloride
Cimetidine Injection	0.5 EU/mg
Cisplatin for Injection	2 EU/mg
Citric Acid, Magnesium Oxide, and Sodium Carbonate Irrigation	2.8 EU/ml
Clavulanate Potassium	0.03 EU/mg if labeled sterile or processed into injectable
Clindamycin for Injection	0.58 EU/mg
Clindamycin Injection	0.58 EU/mg
Clindamycin Phosphate	0.58 EU/mg if labeled sterile or processed into injectable
Codeine Phosphate Injection	5.8 EU/mg
Colchicine Injection	166.7 EU/mg
Colistimethate for Injection	2 EU/mg
Colistimethate Sodium	2 EU/mg if labeled sterile or processed into injectable
Corticotropin for Injection	3.1 EU / USP Corticotropin Unit

Corticotropin Injection	3.1 EU / USP Corticotropin Unit
Corticotropin Zinc Hydroxide Injectable Suspension	3.1 EU / USP Corticotropin Unit
Cupric Chloride Injection	250 EU/mg of copper
Cupric Sulfate Injection	250 EU/mg of copper
Cyanocobalamin Injection	0.4 EU/ug
Cyclophosphamide for Injection	0.2 EU/mg
Cyclosporine Injection	0.84 EU/mg (use 1:10 dilution; mix .1ml with .1ml LAL reagent on vortex mixer for 5 sec.)
Cysteine Hydrochloride Injection	0.7 EU/mg
Cytarabine	0.07 EU/mg if labeled sterile or processed into injectable
Cytarabine for Injection	0.07 EU/mg

## D

Dacarbazine for Injection	0.52 EU/mg
Dactinomycin	100 EU/mg
Dactinomycin for Injection	100 EU/mg
Daunorubicin Hydrochloride for Injection	4.3 EU/mg of daunorubicin
Deferoxamine Mesylate	0.33 EU/mg if labeled sterile or processed into injectable
Deferoxamine Mesylate for Injection	0.33 EU/mg
Desoxycorticosterone Acetate Injection	71.4 EU/mg
Desoxycorticosterone Pivalate Injectable Suspension	2.78 EU/mg
Dexamethasone Acetate Injectable Suspension	21.7 EU/mg
Dexamethasone Injection	21 EU/mg
Dexamethasone Sodium Phosphate Injection	31.3 EU/mg
Dextran 1	25 EU/g
Dextran 40	1 EU/ml
Dextran 40 in Dextrose Injection	1 EU/ml
Dextran 40 in Sodium Chloride Injection	1 EU/ml
Dextran 70	0.5 EU/ml
Dextran 70 in Dextrose Injection	0.5 EU/ml

Dextran 70 in Sodium Chloride Injection	0.5 EU/ml		
Dextrose and Sodium Chloride Injection	10 EU/g		
Dextrose Injection	0.5 EU/ml for Injections containing less than 5% of dextrose	10 EU/ml for Injections containing between 5% and 70 % of dextrose	
Diatrizoate Meglumine and Diatrizoate Sodium Injection	1.8 EU/ml for Injections containing less than 60% of dia. meg.	3.6 EU for Injections containing 60% or more of dia. meglumine	
Diatrizoate Meglumine Injection	1.1 EU/ml for Injections containing less than 50% dia. meg.	5 EU/ml for Injections containing 50% or more dia. meg.	
Diatrizoate Sodium Injection	5.6 EU/ml for Injections containing 20% of diatrizoate sodium	1.3 EU/ml for Injections containing 25% of diatrizoate sodium	5 EU/ml for Injections containing 50% of diatrizoate sodium
Diazepam Injection	11.6 EU/mg		
Diazoxide Injection	0.5 EU/mg		
Dibucaine Hydrochloride Injection	35.7 EU/mg		
Dicyclomine Hydrochloride Injection	17.2 EU/mg		
Diethylstilbestrol Diposphate Injection	0.7 EU/mg		
Diethylstilbestrol Injection	0.7 EU/mg		
Digitoxin Injection	111 EU/mg		
Digoxin Injection	200 EU/mg		
Dihydroergotamine Mesylate Injection	175 EU/mg		
Dihydrostreptomycin Injection	0.5 EU/mg		
Dihydrostreptomycin Sulfate	no limit listed but USP Endotoxin RS referenced		
Dimethicone	10 EU/ml where intended for use in coating containers that come in contact with articles for parenteral use. (Mix 1ml of Dimethicone with 4ml of polydimethylsiloxane having a viscosity of 0.65 centistokes, by mixing on a vortex mixer for 1min. in an extraction tube. Add 10ml water, and mix on a vortex mixer for not less than 60 minutes. Allow layers to		

	separate, and use lower aqueous layer as test specimen.
Dimethyl Sulfoxide Irrigation	0.5 EU/ml
Diphenhydramine Hydrochloride Injection	3.4 EU/mg
Dipyridamole Injection	8.8 EU/mg
Dobutamine for Injection	5.56 EU/mg
Dobutamine in Dextrose Injection	5.56 EU/mg of dobutamine
Dobutamine Injection	2.08 EU/mg
Dolasetron Mesylate Injection	2.7 EU/mg
Dopamine Hydrochloride and Dextrose Injection	16.67 EU/mg of dopamine hydrochloride
Dopamine Hydrochloride Injection	16.67 EU/mg
Doxapram Hydrochloride Injection	3.3 EU/mg
Doxorubicin Hydrochloride Injection	2.2 EU/mg (from prepared 1.1mg/ml doxorubicin hydrochloride)
Doxorubicin Hydrochloride for Injection	2.2 EU/mg (from prepared 1.1mg/ml doxorubicin hydrochloride)
Doxycycline for Injection	1.14 EU/mg
Doxycycline Hyclate	See Doxycycline for Injection
Droperidol Injection	35.7 EU/mg
Dyphylline Injection	0.7 EU/mg

## E

Edetate Calcium Disodium Injection	0.01 EU/mg
Edetate Disodium Injection	0.2 EU/mg
Edrophonium Chloride Injection	8.33 EU/mg
Emetine Hydrochloride Injection	5.4 EU/mg
Ephedrine Sulfate Injection	1.7 EU/mg
Epinephrine Injection	357 EU/mg
Ergonovine Maleate Injection	700 EU/mg
Ergotamine Tartrate Injection	357 EU/mg
Erythromycin Lactobionate for Injection	1 EU/mg of erythromycin
Estradiol Injectable Suspension	250 EU/mg

Estrone Injectable Suspension	88 EU/mg
Ethacrynat Sodium for Injection	5 EU/mg
Etoposide Injection	2 EU/mg (for a conc. of 0.31 mg etoposide activity per ml)
Extended Insulin Human Zinc Suspension	80 EU / 100 USP Insulin Units
Extended Insulin Zinc Suspension	80 EU / 100 USP Insulin Units

## F

Fenoldopam Mesylate Injection	84 EU/mg
Fentanyl Citrate Injection	50 EU/mg
Ferumoxides Injection	12.5 EU/ml
Fludarabine Phosphate for Injection	7.7 EU/mg
Fludeoxyglucose <sup>18</sup> F Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Flumazenil <sup>11</sup> C Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Flunixin Meglumine Injection	4.54 EU/mg of flunixin
Fluorodopa F 18 Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Fluorouracil Injection	0.33 EU/mg
Fluphenazine Hydrochloride Injection	166.7 EU/mg
Folic Acid Injection	357.1 EU/mg
Fructose and Sodium Chloride Injection	0.5 EU/ml
Fructose Injection	0.5 EU/ml
Furosemide Injection	3.6 EU/mg

## G

Gadodiamide	3.5 EU/g
Gadodiamide Injection	0.029 EU/mg
Gadopentetate Dimeglumine Injection	25 EU/ml
Gadoteridol Injection	8.3 EU/ml
Gallamine Triethiodide Injection	5 EU/mg
Gallium Citrate <sup>67</sup> Ga Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Ganciclovir for Injection	0.84 EU/mg

Gentamicin Sulfate	If processed into injectable, see gentamicin injection
Gentamicin Injection	0.71 EU/mg
Glucagon for Injection	125 EU/mg
Glycine Irrigation	0.5 EU/ml
Glycopyrrolate Injection	555.5 EU/mg
Gonadorelin for Injection	3.6 EU/ug
Guaifenesin for Injection	0.05 EU/mg

## H

Half-Strength Lactated Ringer's and Dextrose Injection	0.5 EU/ml
Haloperidol Injection	71.4 EU/mg
Heparin Calcium	0.03 EU / USP Heparin Unit
Heparin Calcium Injection	0.03 EU / USP Heparin Unit
Heparin Lock Flush Solution	0.5 EU/ml
Heparin Sodium	0.03 EU / USP Heparin Unit
Heparin Sodium Injection	0.03 EU / USP Heparin Unit
Histamine Phosphate Injection	125 EU/mg
Hyaluronidase for Injection	2.30 EU / USP Hyaluronidase Unit
Hyaluronidase Injection	2.30 EU / USP Hyaluronidase Unit
Hydralazine Hydrochloride Injection	1.45 EU/mg
Hydrocortisone Injectable Suspension	1.25 EU/mg
Hydrocortisone Sodium Phosphate Injection	1.25 EU/mg of hydrocortisone
Hydrocortisone Sodium Succinate for Injection	1.25 EU/mg of hydrocortisone
Hydromorphone Hydrochloride Injection	88 EU/mg
Hydroxocobalamin Injection	0.4 EU/ug
Hydroxyzine Hydrochloride Injection	3.6 EU/mg
Hyoscyamine Sulfate Injection	714.3 EU/mg

## I

Idarubicin Hydrochloride for Injection	8.9 EU/mg of idarubicin hydrochloride solution at 0.07 mg/ml
Ifosfamide	0.125 EU/mg if labeled sterile or processed into injectable

Ifosfamide for Injection	0.125 EU/mg
Imipenem	0.17 EU/mg if labeled sterile
Imipenem and Cilastatin for Injectable Suspension	0.23 EU/mg of imipenem and 0.23 EU/mg of cilastatin
Imipenem and Cilastatin for Injection	0.17 EU/mg of imipenem and 0.17 EU/mg of cilastatin
Imipramine Hydrochloride Injection	5 EU/mg
Inamrinone Injection	0.5 EU/mg
Indigotindisulfonate Sodium Injection	5 EU/mg
Indium <sup>111</sup> In Capromab Pendetide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Indium <sup>111</sup> In Chloride Solution	175/V EU/ml (V = max. total dose in ml at the expiration time)
Indium <sup>111</sup> In Pentetate Injection	14/V EU/ml (V = max. total dose in ml at the expiration time)
Indium <sup>111</sup> In Satumomab Pendetide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Indium <sup>111</sup> In Pentetreotide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Indocyanine Green	7.1 EU/mg if labeled sterile or processed into injectable
Indocyanine Green for Injection	7.1 EU/mg
Indomethacin for Injection	20 EU/mg of indomethacin at 1.0 mg/ml
Insulin	10 EU/mg
Insulin Human	10 EU/mg
Insulin Human Injection	80 EU / 100 USP Insulin Units
Insulin Human Zinc Suspension	80 EU / 100 USP Insulin Units
Insulin Injection	80 EU / 100 USP Insulin Units
Insulin Lispro	10 EU/mg, using Kinetic Chromogenic method
Insulin Lispro Injection	80 EU / 100 USP Insulin Units, using Kinetic Chromogenic
Insulin Zinc Suspension	80 EU / 100 USP Insulin Units
Inulin in Sodium Chloride Injection	0.1 EU/mg of inulin
Invert Sugar Injection	0.5 EU/ml

Iobenguane <sup>123</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iobenguane <sup>131</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iodinated <sup>125</sup> I Albumin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iodinated <sup>131</sup> I Albumin Aggregated Injection	See Technetium <sup>99</sup> Tcm Albumin Aggregated Injection
Iodinated <sup>131</sup> I Albumin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iodipamide Meglumine Injection	3.6 EU/ml
Iodixanol Injection	0.2 EU / 50 mg of iodine
Iodohippurate Sodium <sup>123</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iodohippurate Sodium <sup>131</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Iohexol Injection	0.2 EU / 50 mg of iodine
Iopamidol Injection	0.6 EU/mg of iodine
Iophendylate Injection	0.9 EU/mg
Iopromide Injection	1.25 EU/ml
Iothalamate Meglumine and Iothalamate Sodium Injection	3.35 EU/ml
Iothalamate Meglumine Injection	0.9 EU/ml
Iothalamate Sodium Injection	3.35 EU/ml
Iothalamate Sodium <sup>125</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Ioversol Injection	1.4 EU/ml
Ioxaglate Meglumine and Ioxaglate Sodium Injection	no limit listed but USP Endotoxin RS referenced
Ioxilan	0.2 EU / 50 mg of iodine
Ioxilan Injection	0.2 EU / 50 mg of iodine
Iron Dextran Injection	0.5 EU / mg of iron
Iron Sorbitex Injection	10.0 EU/ ml
Iron Sucrose Injection	3.7 EU/mg of iron
Isoflupredone Acetate	125 U/ mg of isoflupredone acetate.

Isoflupredone Acetate Injectable Suspension	125 U/ mg of isoflupredone acetate.
Isoniazid Injection	0.3 EU/ mg of Isoniazid
Isophane Insulin Human Suspension	80 EU / 100 USP Insulin Units
Isophane Insulin Suspension	80 EU / 100 USP Insulin Units
Isoproterenol Hydrochloride Injection	1250.0 EU/ mg of isoproterenol hydrochloride
Isoxsuprine Hydrochloride Injection	37.7 EU/mg

## K

Kanamycin Injection	0.67 EU/mg
Kanamycin Sulfate	0.67 EU/mg
Ketamine Hydrochloride Injection	0.4 EU/mg
Ketorolac Tromethamine Injection	5.8 EU/mg

## L

Labetalol Hydrochloride Injection	1.2 EU/mg
Lactated Ringer's and Dextrose Injection	0.5 EU/ml
Lactated Ringer's Injection	0.5 EU/ml
Leucovorin Calcium Injection	1.95 EU/mg
Levocarnitine Injection	0.1 EU/mg
Levorphanol Tartrate Injection	125.0 EU/mg
Lidocaine Hydrochloride	1.1 EU/mg
Lidocaine Hydrochloride and Dextrose Injection	1.1 EU/mg of Lidocaine Hydrochloride
Lidocaine Hydrochloride and Epinephrine Injection	0.7 EU/mg of Lidocaine Hydrochloride
Lidocaine Hydrochloride Injection	1.1 EU/mg
Lincomycin Hydrochloride	0.5 EU/mg of Lincomycin
Lincomycin Injection	0.5 EU/mg of Lincomycin
Lorazepam Injection	100.0 EU/ mg

## M

Magnesium Sulfate in Dextrose Injection	0.039 EU/mg of Magnesium Sulfate
Magnesium Sulfate Injection	0.09 EU/mg
Mangafodipir Trisodium	0.13 EU/mg
Manganese Chloride Injection	0.45 EU/ug of Manganese
Manganese Sulfate Injection	0.45 EU/ug of Manganese

Mannitol in Sodium Chloride Injection	0.04 EU/mg of Manitol	
Mannitol Injection	0.04 EU/ mg for injections containing %10 or less Manitol	2.5 EU/ g for injections containing greater than %10 Manitol
Mechlorethamine Hydrochloride for Injection	12.5 EU/mg	
Menadiol Sodium Diphosphate Injection	25.0 EU/mg	
Menadione Injection	58.3 EU/mg	
Menotropins	2.5 EU/ USP Follicle Stimulating Hormone Unit	
Menotropins for Injection	2.5 EU/ USP Follicle Stimulating Hormone Unit	
Meperidine Hydrochloride Injection	2.4 EU/mg	
Mepivacaine Hydrochloride and Levonordefrin Injection	0.8 EU/mg of Mepivacaine Hydrochloride	
Mepivacaine Hydrochloride Injection	0.8 EU/mg	
Meropenem	0.125 EU/mg	
Meropenem for Injection	0.125 EU/mg	
Mesoridazine Besylate Injection	7.0 EU/mg	
Mespiperone <sup>11</sup> C Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)	
Metaraminol Bitartrate Injection	3.5 EU/mg Metaraminol	
Methadone Hydrochloride Injection	8.8 EU/mg	
Methionine <sup>11</sup> C Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)	
Methocarbamol Injection	0.2 EU/mg	
Methohexital Sodium for Injection	0.5 EU/mg	
Methotrexate for Injection	0.4 EU/mg of Methotrexate Sodium	
Methotrexate Injection	0.4 EU/mg of Methotrexate Sodium	
Methotrimeprazine Injection	17.9 EU/mg	
Methyldopate Hydrochloride Injection	0.5 EU/mg	
Methylene Blue Injection	2.5 EU/ml	
Methylergonovine Maleate Injection	1.7 EU/ug	

Methylprednisolone Sodium Succinate for Injection	0.17 EU/mg of Methylprednisolone
Metoclopramide Injection	2.5 EU/mg
Metoprolol Tartrate Injection	25.0 EU/mg
Metronidazole Injection	0.35 EU/mg
Mezlocillin for Injection	0.06 EU/mg of Mezlocillin
Mezlocillin Sodium	0.06 EU/mg of Mezlocillin
Miconazole Injection	0.1 EU/mg
Minocycline for Injection	1.25 EU/mg
Minocycline Hydrochloride	1.25 EU/mg of Minocycline
Mitomycin for Injection	10 EU/mg
Mitoxantrone Injection	5 EU/ml
Modified Lactated Ringer's and Dextrose Injection	0.5 EU/ml
Morphine Sulfate Injection	17 EU/mg for parenterals 14.29 EU/mg for intrathecals
Morrhuate Sodium Injection	1.4 EU/mg
Multiple Electrolytes and Dextrose Injection Type 2	0.5 EU/ml
Multiple Electrolytes and Dextrose Injection Type 3	0.5 EU/ml
Multiple Electrolytes and Dextrose Injection Type 4	0.5 EU/ml
Multiple Electrolytes and Dextrose Injection Type 1	0.5 EU/ml
Multiple Electrolytes Injection Type 1	0.5 EU/ml
Multiple Electrolytes Injection Type 2	0.5 EU/ml

## N

Nafcillin for Injection	0.13 EU/mg
Nafcillin Injection	0.13 EU/mg
Nafcillin Sodium	0.13 EU/mg if labeled sterile or processed into injectable
Nalorphine Hydrochloride Injection	11.6 EU/mg
Naloxone Hydrochloride Injection	500 EU/mg
Neomycin for Injection	1.3 EU/mg
Neomycin Sulfate	1.3 EU/mg if labeled sterile or processed into injectable
Netilmicin Sulfate Injection	1.25 EU/mg of netilmicin
Niacin Injection	3.5 EU/mg
Niacinamide Injection	3.5 EU/mg
Nitroglycerin Injection	0.1 EU/ug

Norepinephrine Bitartrate  
Injection                    83.4 EU/mg of  
                                  norepinephrine

## O

Ondansetron Injection        9.9 EU/mg  
Orphenadrine Citrate  
Injection                    5.8 EU/mg  
Oxacillin for Injection      0.2 EU/mg  
Oxacillin Sodium            0.2 EU/mg if labeled sterile  
                                  or processed into injectable  
Oxymorphone Hydrochloride  
Injection                    238.1 EU/mg  
Oxytetracycline              0.4 EU/mg if labeled sterile  
                                  or processed into injectable  
Oxytetracycline for Injection    0.4 EU/mg  
Oxytetracycline  
Hydrochloride              0.4 EU/mg if labeled sterile  
                                  or processed into injectable  
Oxytetracycline Injection    0.4 EU/mg  
Oxytocin Injection           35.7 EU / USP Oxytocin Unit

## P

Paclitaxel                    0.4 EU/mg  
Paclitaxel Injection        0.67 EU/mg  
Papaverine Hydrochloride  
Injection                    2.9 EU/mg  
Penicillin G Benzathine     0.01 EU / 100 Penicillin G  
                                  Units if labeled sterile or  
                                  processed into injectable  
Penicillin G Benzathine &  
Penicillin G Procaine  
Injectable Suspension        see Penicillin G Procaine  
                                  Injectable  
Penicillin G Benzathine  
Injectable Suspension        0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Potassium for  
Injection                    0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Potassium  
Injection                    0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Procaine and  
Dihydrostreptomycin Sulfate  
Injectable Suspension        0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Procaine for  
Injectable Suspension        0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Procaine  
Injectable Suspension        0.01 EU / 100 Penicillin G  
                                  Units  
Penicillin G Procaine,  
Dihydrostreptomycin Sulfate,  
and Prednisolone Injectable  
Suspension                    0.01 EU / 100 Penicillin G  
                                  Units

Penicillin G Procaine, Dihydrostreptomycin Sulfate, Chlorpheniramine Maleate, and Dexamethasone Injectable Suspension	0.01 EU / 100 Penicillin G Units
Penicillin G Sodium	0.01 EU / 100 Penicillin G Units
Penicillin G Sodium for Injection	0.01 EU / 100 Penicillin G Units
Penicillin G Procaine	0.01 EU / 100 Penicillin G Units if labeled sterile or processed into injectable
Pentazocine Injection	5.8 EU/mg
Pentazocine Lactate Injection	5.8 EU/mg
Pentobarbital Sodium Injection	0.8 EU/mg
Perflutren Protein-Type A Microspheres for Injection	0.5 EU/ml
Perflutren Protein-Type A Microspheres Injectable Suspension	0.5 EU/ml
Perphenazine Injection	35.7 EU/mg
Phenobarbital Sodium	0.8 EU/mg if labeled sterile or processed into injectable
Phenobarbital Sodium for Injection	0.8 EU/mg
Phenobarbital Sodium Injection	0.3 EU/mg
Phentolamine Mesylate for Injection	5.8 EU/mg
Phenylbutazone Injection	1.1 EU/mg
Phenylephrine Hydrochloride Injection	25 EU/mg
Phenytoin Sodium Injection	0.3 EU/mg
Physostigmine Salicylate Injection	83.4 EU/mg
Phytonadione Injectable Emulsion	14 EU/mg
Phytonadione Injection	14 EU/mg
Piperacillin	0.07 EU/mg if labeled sterile or processed into injectable
Piperacillin for Injection	0.07 EU/mg
Piperacillin Sodium	0.07 EU/mg if labeled sterile or processed into injectable
Plicamycin for Injection	100 EU/mg
Potassium Acetate Injection	8.80 EU/mEq
Potassium Chloride for Injection Concentrate	8.80 EU/mEq

Potassium Chloride in Dextrose and Sodium Chloride Injection	0.5 EU/ml
Potassium Chloride in Dextrose Injection	0.5 EU/ml
Potassium Chloride in Lactated Ringer's and Dextrose Injection	0.5 EU/ml
Potassium Chloride in Sodium Chloride Injection	0.5 EU/ml
Potassium Phosphates Injection	1.10 EU/mg
Pralidoxime Chloride	0.1 EU/mg if labeled sterile or processed into injectable
Pralidoxime Chloride for Injection	0.1 EU/mg
Prednisolone Sodium Phosphate Injection	5 EU/mg
Prednisolone Sodium Succinate for Injection	5.8 EU/mg of prednisolone
Prednisolone Tebutate Injectable Suspension	8.8 EU/mg
Prednisone Injectable Suspension	2.27 EU/mg
Prilocaine and Epinephrine Injection	0.9 EU/mg of prilocaine hydrochloride
Prilocaine Hydrochloride Injection	0.9 EU/mg
Procainamide Hydrochloride Injection	0.35 EU/mg
Procaine and Tetracaine Hydrochlorides and Levonordefrin Injection	0.6 EU/mg of procaine hydrochloride
Procaine Hydrochloride	0.6 EU/ml if labeled sterile or processed into injectable
Procaine Hydrochloride and Epinephrine Injection	0.6 EU/mg of procaine hydrochloride
Procaine Hydrochloride Injection	0.6 EU/mg
Prochlorperazine Edisylate Injection	17.9 EU/mg of prochlorperazine
Promazine Hydrochloride Injection	1.8 EU/mg
Promethazine Hydrochloride Injection	5.0 EU/mg
Prompt Insulin Zinc Suspension	80 EU / 100 USP Insulin Units

Propoxycaine and Procaine Hydrochlorides and Levonordefrin Injection	0.8 EU/mg of propoxycaine hydrochloride
Propoxycaine and Procaine Hydrochlorides and Norepinephrine Bitartrate Injection	0.8 EU/mg of propoxycaine hydrochloride
Propranolol Hydrochloride Injection	55.6 EU/mg
Protamine Sulfate for Injection	7 EU/mg
Protamine Sulfate Injection	7 EU/mg
Protein Hydrolysate Injection	0.5 EU/mg
Pyridostigmine Bromide Injection	17 EU/mg
Pyridoxine Hydrochloride Injection	0.4 EU/mg

## Q

Quinidine Gluconate Injection 0.6 EU/mg

## R

Raclopride <sup>11</sup> C Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Ranitidine in Sodium Chloride Injection	7 EU/mg of ranitidine
Ranitidine Injection	7 EU/mg
Repository Corticotropin Injection	3.1 EU / USP Corticotropin Unit
Reserpine Injection	71.5 EU/mg
Riboflavin Injection	7.1 EU/mg
Rifampin for Injection	0.5 EU/mg (from 10mg/ml solution diluted down to 0.12mg/ml)
Ringer's and Dextrose Injection	0.5 EU/ml
Ringer's Injection	0.5 EU/ml
Ringer's Irrigation	0.5 EU/ml
Ritodrine Hydrochloride Injection	0.5 EU/ml
Rose Bengal Sodium <sup>131</sup> I Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Rubidium Chloride <sup>82</sup> Rb Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)

## S

Samarium <sup>153</sup> Sm Lexidronam Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sargramostim	5 EU/mg
Sargramostim for Injection	50 EU/mg
Scopolamine Hydrobromide Injection	555 EU/mg
Secobarbital Sodium	0.9 EU/mg if labeled sterile or processed into injectable
Secobarbital Sodium for Injection	0.9 EU/mg
Secobarbital Sodium Injection	0.9 EU/mg
Selenious Acid Injection	3.5 EU/ug
Sincalide for Injection	83.3 EU/ug
Sisomicin Sulfate Injection	0.5 EU/mg
Sodium Acetate <sup>11</sup> C Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Acetate Injection	3.9 EU/mEq
Sodium Bicarbonate Injection	5 EU/mEq
Sodium Chloride Injection	0.5 EU/ml (labeled amount of sodium chloride is 0.5% - 0.9%)
	3.6 EU/ml (labeled amount of sodium chloride is 3.0% - 24.3%)
Sodium Chloride Irrigation	0.5 EU/ml
Sodium Chromate <sup>51</sup> Cr Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Fluoride <sup>18</sup> F Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Iodide <sup>123</sup> I Solution	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Iodide <sup>131</sup> I Solution	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Lactate Injection	2 EU/mEq
Sodium Nitrite Injection	0.33 EU/mg
Sodium Nitroprusside	0.05 EU/ug if labeled sterile or processed into injectable
Sodium Nitroprusside for Injection	0.05 EU/ug
Sodium Pertechnetate <sup>99</sup> Tcm Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)

Sodium Phosphate <sup>32</sup> P Solution	175/V EU/ml (V = max. total dose in ml at the expiration time)
Sodium Phosphates Injection	1.1 EU/mg
Sodium Thiosulfate Injection	0.03 EU/mg
Spectinomycin for Injectable Suspension	??
Spectinomycin Hydrochloride	0.09 EU/mg of spectinomycin if labeled sterile or processed into injectable
Sterile Erythromycin Gluceptate	1 EU/mg of erythromycin
Sterile Erythromycin Lactobionate	1 EU/mg of erythromycin
Sterile Vancomycin Hydrochloride	0.33 EU/mg of Vancomycin
Sterile Water for Inhalation	0.5 EU/ml
Sterile Water for Injection	0.25 EU/ml
Sterile Water for Irrigation	0.25 EU/ml
Streptomycin for Injection	0.25 EU/mg
Streptomycin Injection	0.25 EU/mg
Streptomycin Sulfate	0.25 EU/mg if labeled sterile or processed into injectable
Strontium Chloride <sup>89</sup> Sr Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Succinylcholine Chloride	2 EU/mg if labeled sterile or processed into injectable
Succinylcholine Chloride for Injection	2 EU/mg
Succinylcholine Chloride Injection	2 EU/mg
Sufentanil Citrate Injection	6.25 EU/ml
Sulbactam Sodium	0.17 EU/mg of sulbactam if labeled sterile or processed into injectable
Sulfadiazine Sodium Injection	0.1 EU/mg

## T

Technetium <sup>99</sup> Tcm (Pyro- and trimeta-) Phosphates Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Albumin Aggregated Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Albumin Colloid Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)

Technetium <sup>99</sup> Tcm Albumin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Apcitide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Arcitumomab Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Bicisate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Depreotide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Etidronate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Exametazime Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Gluceptate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Lidofenin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Mebrofenin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Medronate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Mertiatide Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Nofetumomab Merpentan Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Oxidronate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Pentetate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Pyrophosphate Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Red Blood Cells Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)

Technetium <sup>99</sup> Tcm Sestamibi Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Succimer Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Sulfur Colloid Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Technetium <sup>99</sup> Tcm Tetrofosmin Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Terbutaline Sulfate Injection	1250 EU/mg
Testosterone Injectable Suspension	3.5 EU/mg
Tetracaine Hydrochloride	0.7 EU/mg if labeled sterile or processed into injectable
Tetracaine Hydrochloride for Injection	0.7 EU/mg
Tetracaine Hydrochloride in Dextrose Injection	1 EU/mg
Tetracaine Hydrochloride Injection	0.7 EU/mg
Tetracycline Hydrochloride	0.5 EU/mg if labeled sterile or processed into injectable
Tetracycline Hydrochloride for Injection	0.5 EU/mg
Thallous Chloride <sup>201</sup> Tl Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Theophylline in Dextrose Injection	1 EU/mg of anhydrous theophylline
Thiamine Hydrochloride Injection	3.5 EU/mg
Thiopental Sodium for Injection	1 EU/mg
Thiotepa for Injection	6.25 EU/mg
Thiothixene Hydrochloride for Injection	88 EU/mg of thiothixene
Thiothixene Hydrochloride Injection	88 EU/mg of thiothixene
Ticarcillin and Clavulanic Acid for Injection	0.07 EU/mg of ticarcillin
Ticarcillin and Clavulanic Acid Injection	0.07 EU/mg of ticarcillin
Ticarcillin Disodium	0.05 EU/mg if labeled sterile or processed into injectable
Ticarcillin for Injection	0.05 EU/mg

Ticarcillin Monosodium	0.05 EU/mg if labeled sterile or processed into injectable
Tiletamine and Zolazepam for Injection	0.07 EU/mg of combined tiletamine and zolazepam equivalents
Tiletamine Hydrochloride	0.07 EU/mg of tiletamine if labeled sterile or processed into injectable
Tilmicosin Injection	0.5 EU/mg
Tobramycin	2 EU/mg if labeled sterile or processed into injectable
Tobramycin for Injection	2 EU/mg
Tobramycin Inhalation Solution	60 EU/ml
Tobramycin Injection	2 EU/mg
Tobramycin Sulfate	2 EU/mg if labeled sterile or processed into injectable
Tolazoline Hydrochloride Injection	0.8 EU/mg
Tolbutamide	0.35 EU/mg of tolbutamide sodium if labeled sterile or processed into injectable
Tolbutamide for Injection	0.35 EU/mg of tolbutamide sodium
Triamcinolone Acetonide Injectable Suspension	4.4 EU/mg
Triamcinolone Diacetate Injectable Suspension	7.1 EU/mg
Triamcinolone Hexacetonide Injectable Suspension	17.2 EU/mg
Trifluoperazine Hydrochloride Injection	172 EU/mg of trifluoperazine
Triflupromazine Hydrochloride Injection	5.8 EU/mg
Trimethobenzamide Hydrochloride Injection	1.8 EU/mg
Tripelennamine Hydrochloride Injection	4.6 EU/mg
Tromethamine for Injection	0.03 EU/mg
Tubocurarine Chloride Injection	10 EU/mg

## **U**

Urea	0.003 EU/mg
Urea for Injection	0.003 EU/mg

## **V**

Valrubicin Intravesical Solution	0.14 EU/ mg of Valrubicin
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Vancomycin Hydrochloride for Injection	0.33 EU/mg of Vancomycin
Vancomycin Injection	0.33 EU/mg
Vasopressin Injection	17.0 EU/ Vasopressin Unit
Verapamil Hydrochloride Injection	16.7 EU/mg
Verteporfin	0.5 EU/mg
Vidarabine	0.5 EU/mg except when used in ophthalmic dosage forms
Vinblastine Sulfate	10.0 EU/mg
Vinblastine Sulfate for Injection	10.0 EU/mg
Vincristine Sulfate for Injection	100.0 EU/ mg
Vincristine Sulfate Injection	62.5 EU/mg
Warfarin Sodium for Injection	24.0 EU/mg

## **W**

Water for Injection	0.25 EU/ml
Water <sup>15</sup> O Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)

## **X**

Xenon <sup>133</sup> Xe Injection	175/V EU/ml (V = max. total dose in ml at the expiration time)
Xylazine Injection	1.7 EU/mg

## **Y**

Yohimbine Injection	45.5 EU/mg
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## **Z**

Zidovudine Injection	1.0 EU/mg
Zinc Chloride Injection	25.0 EU/mg Zinc
Zinc Sulfate Injection	25.0 EU/mg Zinc
Zolazepam Hydrochloride	0.07 EU/mg Zolazepam