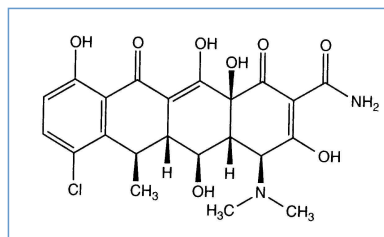


Stabilis



Doxycycline hyclate



Tradename

Doximycin	Finland
Doxy	New Zealand, United States of America
Doxycyclin	Luxembourg
Doxycycline	United States of America
Doxycyclinum	Poland
Doxyferm	Sweden
Doxyhexal	Germany, Luxembourg
Doxylin	Norway
Doxymycin	Finland
Vibramycin	Netherlands, United States of America
Vibraveineuse	France, Morocco, Switzerland
Vibravenös	Austria, Switzerland
Vibravenosa	Colombia, Spain
Vibravenous	United Arab Emirates
Zadorin	Switzerland



Stability in solutions

		10 mg/ml	-20°C		56			563
		1 mg/ml	-20°C		56			563
PVC		0,8 & 1 mg/ml	23°C		96			1664
PVC		0,8 & 1 mg/ml	4°C		7			1664






























































Factors which affect stability














				1415
--	--	--	--	------



Compatibility

			
		Doxycycline hyclate : 1 mg/ml Aciclovir sodium : 5 mg/ml	 336
		Doxycycline hyclate : 1 mg/ml Allopurinol sodium : 3 mg/ml	 307
		Doxycycline hyclate : 1 mg/ml Amifostine : 10 mg/ml	 3
		Doxycycline hyclate : 0.25 mg/ml Amiodarone hydrochloride : 4 mg/ml	  385
		Doxycycline hyclate : 1 mg/ml Aztreonam : 40 mg/ml	 99
		Doxycycline hyclate : 1 mg/ml Bivalirudin : 5 mg/ml	 1713
		Doxycycline hyclate Calcium gluconate	3644
		Doxycycline hyclate : 1 mg/ml Cefiderocol sulfate tosylate : 20 mg/mL	  4528
		Doxycycline hyclate : 1 mg/ml Ceftolozane / tazobactam : 10/5 mg/ml	  3828
		Doxycycline hyclate : 1 mg/ml Cisatracurium besylate : 0.1 >> 5 mg/ml	 299
		Doxycycline hyclate : 1 mg/ml Dexmedetomidine : 4 µg/ml	 1712
		Doxycycline hyclate : 1 & 10 mg/ml Diltiazem hydrochloride : 5 mg/ml	 198
		Doxycycline hyclate : 1 mg/ml Docetaxel : 0.9 mg/ml	 1754
		Doxycycline hyclate Erythromycin lactobionate	3674
		Doxycycline hyclate : 1 mg/ml Etoposide phosphate : 5 mg/ml	 1410
		Doxycycline hyclate : 1 mg/ml Fenoldopam mesylate : 80 µg/ml	 1803
		Doxycycline hyclate : 1 mg/ml Filgrastim : 30 µg/ml	 244
		Doxycycline hyclate : 1 mg/ml	 1415
		Doxycycline hyclate : 10 mg/ml	 999
		Doxycycline hyclate : 1 mg/ml	 301
		Doxycycline hyclate : 1 mg/ml Fludarabine phosphate : 1 mg/ml	 492
		Doxycycline hyclate : 1 mg/ml Fosfomycin : 30 mg/ml	  4055
		Doxycycline hyclate : 1 mg/ml Gemcitabine hydrochloride : 10 mg/ml	 1423
		Doxycycline hyclate : 1 mg/ml Granisetron hydrochloride : 0.05 mg/ml	 182

		Doxycycline hyclate : 1 mg/ml Heparin sodium : 50 UI/ml	∅	317
		Doxycycline hyclate : 1 mg/ml Hetastarch : 60 mg/ml	▲	465
		Doxycycline hyclate : 1 mg/ml Hetastarch : 60 mg/ml	▲	472
		Doxycycline hyclate : 1 mg/ml Hetastarch : 60 mg/ml		1721
		Doxycycline hyclate : 1 mg/ml Hydromorphone hydrochloride : 0.2 mg/ml	◆	405
		Doxycycline hyclate : 1 mg/ml Isavuconazonium sulfate : 1.5 mg/ml	▲◆	3829
		Doxycycline hyclate : 1 mg/ml Linezolid : 2 mg/ml	∅	1925
		Doxycycline hyclate : 1 mg/ml Magnesium sulfate : 16.67 >> 100 mg/ml	◆	1047
		Doxycycline hyclate : 1 mg/ml Melphalan : 0.1 mg/ml	▲	307
		Doxycycline hyclate : 0,2 & 1 mg/ml Meropenem : 20 & 50 mg/ml	▲	266
		Doxycycline hyclate : 0.2 & 1 mg/ml Meropenem : 1 mg/ml	▲	266
		Doxycycline hyclate Mitomycin		4471
		Doxycycline hyclate Mitomycin		3128
		Doxycycline hyclate : 1 mg/ml Morphine sulfate : 1 mg/ml	◆	405
		Doxycycline hyclate Morphine sulfate		3531
		Doxycycline hyclate : 1 mg/ml Ondansetron hydrochloride : 1 mg/ml	▲	334
		Doxycycline hyclate : 1 mg/ml Pemetrexed disodium : 20 mg/ml	▲	1953
		Doxycycline hyclate : 1 mg/ml Pethidine hydrochloride : 10 mg/ml	◆	405
		Doxycycline hyclate : 5 mg/ml Phloroglucinol : 2,5 mg/ml		3791
		Doxycycline hyclate : 1 mg/ml Piperacillin sodium / tazobactam : 40/5 mg/ml	◆	81
		Doxycycline hyclate : 1 mg/ml Plazomicin sulfate : 24 mg/ml	▲	4145
		Doxycycline hyclate : 1 mg/ml Propofol : 10 mg/ml	∅	300
		Doxycycline hyclate : 1 mg/ml Remifentanil hydrochloride : 25 & 250 µg/ml	▲	59
		Doxycycline hyclate : 1 mg/ml Sargramostim : 10 µg/ml	▲	335
		Doxycycline hyclate : 1 mg/ml Sulbactam/durlobactam : 15/15 mg/ml	▲	4801
		Doxycycline hyclate : 5 mg/ml Tacrolimus : 1000 µg/ml	▲	479

		Doxycycline hyclate : 1 mg/ml Tedizolid phosphate : 0.8 mg/ml		3827
		Doxycycline hyclate : 1 mg/ml Telavancin hydrochloride : 7.5 mg/ml		3254
		Doxycycline hyclate : 1 mg/ml Teniposide : 0.1 mg/ml		905
		Doxycycline hyclate : 1 mg/ml Theophylline : 4 mg/ml		317
		Doxycycline hyclate : 1 mg/ml Thiotepa : 1 mg/ml		249
		Doxycycline hyclate : 1 mg/ml Vinorelbine tartrate : 1 mg/ml		84



Route of administration



References

	Type	Publication
3	Journal	Trissel LA, Martinez JF. Compatibility of amifostine with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1995 ; 52: 2208-2212.
59	Journal	Trissel LA, Gilbert DL, Martinez JF, Kim MC. Compatibility of remifentanyl hydrochloride with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1997 ; 54: 2192-2196.
81	Journal	Trissel LA, Martinez JF. Compatibility of piperacillin sodium plus tazobactam with selected drugs during simulated Y-site injection. Am J Hosp Pharm 1994 ; 51: 672-678.
84	Journal	Trissel LA, Martinez JF. Visual, turbidimetric, and particle-content assessment of compatibility of vinorelbine tartrate with selected drugs during simulated Y-site injection. Am J Hosp Pharm 1994 ; 51: 495-499.
99	Journal	Trissel LA, Martinez JF. Compatibility of aztreonam with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1995 ; 52: 1086-1090.
182	Journal	Trissel LA, Gilbert DL, Martinez JF. Compatibility of granisetron hydrochloride with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1997 ; 54: 56-60.
198	Journal	Gayed AA, Kheshary PR, Hinkle RL. Visual compatibility of diltiazem injection with various diluents and medications during simulated Y-site injection. Am J Health-Syst Pharm 1995 ; 52: 516-520.
244	Journal	Trissel LA, Martinez JF. Compatibility of filgrastim with selected drugs during simulated Y-site administration. Am J Hosp Pharm 1994 ; 51: 1907-1913.
249	Journal	Trissel LA, Martinez JF. Compatibility of thiotepa (lyophilized) with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1996 ; 53: 1041-1045.














































266	Journal	Patel PR. Compatibility of meropenem with commonly used injectable drugs. Am J Health-Syst Pharm 1996 ; 53: 2853-2855.
299	Journal	Trissel LA, Martinez JF, Gilbert DL. Compatibility of cisatracurium besylate with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1997 ; 54: 1735-1741.
300	Journal	Trissel LA, Gilbert DL, Martinez JF. Compatibility of propofol injectable emulsion with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1997 ; 54: 1287-1292.
301	Journal	Trissel LA, Gilbert DL, Martinez JF, Baker MB, Walter WV, Mirtallo JM. Compatibility of parenteral nutrient solutions with selected drugs during simulated Y-site administration. Am J Health-Syst Pharm 1997 ; 54: 1295-1300.
307	Journal	Trissel LA, Martinez JF. Compatibility of allopurinol sodium with selected drugs during simulated Y-site administration. Am J Hosp Pharm 1994 ; 51: 1792-1799.
317	Journal	Kershaw BP, Monnier HL, Mason JH. Visual compatibility of premixed theophylline or heparin with selected drugs for IV administration. Am J Hosp Pharm 1993 ; 50: 1360-1362.
334	Journal	Trissel LA, Tramonte SM, Grilley BJ. Visual compatibility of ondansetron hydrochloride with selected drugs during simulated Y-site injection. Am J Hosp Pharm 1991 ; 48: 988-992.
335	Journal	Trissel LA, Bready BB, Kwan JW, Santiago NM. Visual compatibility of sargramostim with selected antineoplastic agents, anti-infectives, or other drugs during simulated Y-site injection. Am J Hosp Pharm 1992 ; 49: 402-406.
336	Journal	Forman JK, Lachs JR, Souney PF. Visual compatibility of acyclovir sodium with commonly used intravenous drugs during simulated Y-site injection. Am J Hosp Pharm 1987 ; 44: 1408-1409.
385	Journal	Benedict MK, Roche VF, Banakar UV, Hilleman DE. Visual compatibility of amiodarone hydrochloride with various antimicrobial agents during simulated Y-site injection. Am J Hosp Pharm 1988 ; 45: 1117-1118.
405	Journal	Nieves-Cordero AL, Luciw HM, Souney PF. Compatibility of narcotic analgesic solutions with various antibiotics during simulated Y-site injection. Am J Hosp Pharm 1985 ; 42: 1108-1109.
465	Journal	Wohlford JG, Wright JC, Wilson MR. More information on the visual compatibility of hetastarch with injectable critical-care drugs. Am J Hosp Pharm 1990 ; 47: 297-298.
472	Journal	Wohlford JG, Fowler MD. Visual compatibility of hetastarch with injectable critical-care drugs. Am J Hosp Pharm 1989 ; 46: 995-996.
479	Journal	Min DI, Brown T, HWang GC. Visual compatibility of tacrolimus with commonly used drugs during simulated Y-site injection. Am J Hosp Pharm 1992 ; 49: 2964-2966.
492	Journal	Trissel LA, Parks NPT, Santiago NM. Visual compatibility of fludarabine phosphate with antineoplastic drugs, anti-infectives, and other selected drugs during simulated Y-site injection. Am J Hosp Pharm 1991 ; 48: 2186-2189.
563	Journal	Petrick RJ, Wolleben JE, Vargas TA. Stability of frozen solutions of doxycycline hyclate for injection. Am J Hosp Pharm 1978 ; 35: 1386-1387.

905	Journal	Trissel LA, Martinez JF. Screening teniposide for Y-site physical incompatibilities. Hosp Pharm 1994 ; 29: 1010-1017.
999	Journal	Watson D. Piggyback compatibility of antibiotics with pediatric parenteral nutrition solution. JPEN 1985 ; 9: 220-224.
1047	Journal	Souney PF, Colucci RD, Mariani G, Campbell D. Compatibility of magnesium sulfate solutions with various antibiotics during simulated Y-site injection. Am J Hosp Pharm 1984 ; 41: 323-324.
1410	Journal	Trissel LA, Martinez JF, Simmons M. Compatibility of etoposide phosphate with selected drugs during simulated Y-site injection. J Am Pharm Assoc 1999 ; 39: 141-145.
1415	Journal	Trissel L.A, Gilbert D.L, Martinez J.F, Baker M.B, Walter W.V, Mirtallo J.M. Compatibility of medications with 3-in-1 parenteral nutrition admixtures. JPEN 1999 ; 23: 67-74.
1423	Journal	Trissel LA, Martinez JF, Gilbert DL. Compatibility of gemcitabine hydrochloride with 107 selected drugs during simulated Y-site injection. J Am Pharm Assoc 1999 ; 39: 514-518.
1664	Journal	King AD, Stewart JT, Warren FW. Stability of cefmetazole-doxycycline mixtures in sodium chloride and dextrose injections. J Clin Pharm Ther 1994 ; 19: 317-325.
1712	Journal	Trissel LA, Saenz CA. Compatibility screening of Precedex during simulated Y-site administration with other drugs. Int J Pharm Compound 2002 ; 6: 230-233.
1713	Journal	Trissel LA, Saenz CA. Compatibility screening of bivalirudin during simulated Y-site administration with other drugs. Int J Pharm Compound 2002 ; 6: 311-315.
1721	Journal	Trissel LA, Williams KY, Baker MB. Compatibility screening of Hextend during simulated Y-site administration with other drugs. Int J Pharm Compound 2001 ; 5: 69-72.
1754	Journal	Trissel LA, Gilbert DL, Wolkin AC. Compatibility of docetaxel with selected drugs during simulated Y-site administration. Int J Pharm Compound 1999 ; 3: 241-244.
1803	Journal	Trissel, LA, Saenz CA, Ogundele OB, Ingram D, Baker MB. Compatibility of fenoldopam mesylate with other drugs during simulated Y-site administration. Am J Health-Syst Pharm 2003 ; 60: 80-85.
1925	Journal	Trissel LA, Williams KY, Gilbert DL. Compatibility screening of linezolid injection during simulated Y-site administration with other drugs and infusion solutions. J Am Pharm Assoc 2000 ; 40: 515-519.
1953	Journal	Trissel LA, Saenz CA, Ogundele AB, Ingram DS. Physical compatibility of pemetrexed disodium with other drugs during simulated Y-site administration. Am J Health-Syst Pharm 2004 ; 61: 2289-2293.
3128	Manufacturer	Mitomycine (Amétycine®) - Résumé Caractéristiques du Produit Prostrakan 2013
3254	Journal	Housman S.T, Tessier P.R, Nicolau D.P, Kuti J.L. Physical compatibility of telavancin hydrochloride with select i.v. drugs during simulated Y-site administration Am J Health-Syst Pharm 2011 ; 68: 2265-2270.
3531	Manufacturer	Morphine sulphate 10 mg/mL injection BP – Summary of Product Characteristics Wockhardt 2014
3644	Manufacturer	Calcium gluconate® - Summary of Product Characteristics Hameln Pharmaceuticals 2010

3674	Manufacturer	Erythromycin lactobionate - Summary of Product Characteristics PanPharma 2016
3791	Poster	Sadou Yaye H, Burtet E, Hamel C, Aljhni R, Gard C, Tilleul P. Étude de la compatibilité physico-chimique du phloroglucinol injectable durant les mélanges au sein des tubulures en Y. Apifh Congress, Paris November 2014 2014
3827	Poster	Ghazi I.M, Hamada Y, Nicolau D.P. Compatibility of tedizolid phosphate with selected intravenous drugs via simulated Y-site conditions. ASHP Midyear 2015
3828	Poster	Thabit A.K, Hamada Y, Nicolau D.P. Ceftozolane/tazobactam physical compatibility during simulated Y-site administration. ASHP Midyear 2015
3829	Poster	So W, Kim L, Thabit A.K, Nicolau D.P, Kuti J.L. Compatibility of isavunazonium sulfate during simulated Y-site administration. ASHP Midyear 2015
4055	Journal	Monogue M, Almarzoky Abuhussain S, Kuti J, Nicolau D. Physical compatibility of fosfomycin for injection with select i.v. drugs during simulated Y-site administration. Am J Health-Syst Pharm 2018 , 75, 1:36-44
4145	Journal	Asempa T.E, Avery L.M, Kidd J.M, Kuti J.L, Nicolau D.P. Physical compatibility of plazomicin with select i.v. drugs during simulated Y-site administration. Am J Health-Syst Pharm 2018 ;75,14:1048-1056
4471	Manufacturer	Amétycine 10 mg poudre pour solution injectable - Résumé des caractéristiques du produit - Oct 10, 2019 Kyowa Kirin Pharma 2019
4528	Journal	Lu J, Liu Q, Kupiec T, Vail H, Lunch L, Fam D, Vu N. Physical Compatibility of Cefiderocol with Selected Intravenous Drugs During Simulated Y-site Administration. Int J Pharm Compound 2021 ;25,1:52-61
4801	Journal	Ruiz V, Yuwei Shen Y, Abouelhassan Y, Fouad A, Nicolau D, Kuti J. Physical compatibility of sulbactam/durlobactam with select intravenous drugs during simulated Y-site administration. Am J Health-Syst Pharm 2024 ;51,1:



Dictionary

 Antibiotic	 injection
 Tradename	 Stability in solutions
 Container	 Molecule
 Concentration	 Temperature
 Storage	 Duration of stability
 Biosimilar	 conflicting data
 References	 Glass
 Water for Injection	 Protect from light
 Day	 Glucose 5%
 Polyvinyl chloride	 NaCl 0,9% or Glucose 5%
 Not specified	 Hour
 Factors which affect stability	 Solvent
 Parenteral nutrition (with lipids)	 Induces
 Degradation	 Compatibility
 Compound	 Compatible
 Immediate precipitation	 Incompatible
 Sodium chloride 0,9%	 Unspecified incompatibility
 Immediate instability of the emulsion	 Parenteral nutrition (binary mixture)
 Color change after 1 hour	 None
 specific solvent	 Chemical instability
 Immediate turbidity	 Route of administration
 Intravenous infusion	 References
 Dictionary	