



SyrSpend[®] SF

Compatibility table

Version 17.0

**SyrSpend® SF
PH4 (liquid)
(PRESERVED)**



**SyrSpend® SF
PH4 Neo (dry)
(PRESERVED)**



**SyrSpend® SF
PH4 (dry)
(UNPRESERVED)**



**SyrSpend® SF
ALKA (dry)
(UNPRESERVED)**



Active pharmaceutical Ingredient (API)	Concentration	Physical and chemical stability (days)	Storage	Physical and chemical stability (days) [§]	Physical and chemical stability (days) [§]	Storage
Acetaminophen (paracetamol) ¹⁶	50 mg/mL	90				
Acetazolamide ²¹	25 mg/mL	90				
Allopurinol ¹⁶	20 mg/mL	90				
Alprazolam ²⁰	1 mg/mL	90				
Amiodarone HCl ^{*, 1,34}	5 mg/mL	90				
	20 mg/mL	90				
Amitriptyline HCl ¹⁶	10 mg/mL	90				
Amlodipine (as besylate) ²	1 mg/mL	90				
Amoxicillin (as trihydrate)	50 mg/mL	30				
Aripiprazole	1 mg/mL	90				
	1 mg/mL	60				
Atenolol ³	5 mg/mL	90				
	5 mg/mL	90				
Atropine sulfate ²⁰	0.1 mg/mL	90				
Azathioprine ²⁹	50 mg/mL	14				
Baclofen ^{21, 28}	2 mg/mL	90				
	10 mg/mL	90				
Caffeine ¹⁷	10 mg/mL	90				
Captopril ⁴	0.8 mg/mL	14				
Carbamazepine ¹⁶	25 mg/mL	90				
Carvedilol ^{17, 28}	1 mg/mL	90				
	5 mg/mL	90				
Cephalexin	50 mg/mL	0 / 30				
Celecoxib (capsules) ²²	10 mg/mL	90				
Chloral hydrate ²²	100 mg/mL	60				
Chloroquine phosphate ²	15 mg/mL	90				
Cholecalciferol (vit. D3) ⁵	50,000 IU/mL	90				
Ciprofloxacin HCl ²²	50 mg/mL	90 / 60				
Clobazam ^{*, 45}	2 mg/mL	84				
Clomipramine HCl ¹⁷	5 mg/mL	90				
Clonazepam ³	0.2 mg/mL	90				
Clonidine HCl ²⁹	0.1 mg/mL	90				
Clopidogrel (as bisulfate, tablets) ²⁹	5 mg/mL	30				
Cloxacilline (capsules) ^{*, 23}	50 mg/mL	5				
Clozapine (tablets)	25 mg/mL	90				
Cyclosporine ²²	100 mg/mL	90				
Dapsone ²	2 mg/mL	90				

Compatible combination

Combination not recommended

2-8 °C

15-25 °C

Storage temperature

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Active pharmaceutical Ingredient (API)	Concentration	Physical and chemical stability (days)	Storage	Physical and chemical stability (days) [§]	Physical and chemical stability (days) [§]	Storage
Darunavir & cobicistat (tablets)*, 30	20 / 3.75 mg/mL	7	🧊	●	●	🧊
Dexamethasone*, 3, 43	1 mg/mL	90	🧊 🔥	●	●	🧊
	5 mg/mL	60	🧊 🔥	●	●	🧊
Diclofenac sodium ³	5 mg/mL	90	🧊 🔥	●	●	🧊
Diltiazem HCl ³	12 mg/mL	90	🧊 🔥	●	●	🧊
Dimenhydrinate	2.5 mg/mL	90	🧊 🔥	●	●	🧊
Dipyridamole ²¹	10 mg/mL	90	🧊 🔥	●	●	🧊
Domperidone ¹⁶	5 mg/mL	90	🧊 🔥	●	●	🧊
Doxycycline*, 31	2 mg/mL	90	🧊	●	●	🧊
	50 mg/mL	90	🧊	●	●	🧊
Enalapril maleate ³	1 mg/mL	90	🧊 🔥	●	●	🧊
Esomeprazole magnesium trihydrate**, 18	3 mg/mL	●	●	●	60	🧊
Ethambutol 2 HCl** (tablets) ²⁹	50 mg/mL	30	🧊	●	●	🧊
Ethambutol 2 HCl**, 29	50 mg/mL	90	🧊 🔥	●	●	🧊
	100 mg/mL	90	🧊 🔥	●	●	🧊
Flecainide acetate (tablets) ²²	20 mg/mL	90	🧊 🔥	●	●	🧊
Fluoxetine HCl*, 31	2 mg/mL	90	🧊 🔥	●	●	🧊
Folic acid ¹⁷	1 mg/mL	90	🧊 🔥	●	●	🧊
Furosemide ¹	10 mg/mL	●	●	●	14	🧊
Gabapentin ⁵	50 mg/mL	90	🧊 🔥	●	●	🧊
Glutamine ²⁰	250 mg/mL	90	🧊 🔥	●	●	🧊
Glycopyrrolate (glycopyrronium bromide) ²²	0.5 mg/mL	90	🧊 🔥	●	●	🧊
Griseofulvin ²⁹	25 mg/mL	90	🧊 🔥	●	●	🧊
Haloperidol ⁵	0.5 mg/mL	90	🧊 🔥	●	●	🧊
Hydralazine HCl ²⁹	4 mg/mL	30	🧊 🔥	●	●	🧊
Hydrochlorothiazide*, 17, 28, 43	2 mg/mL	60	🧊 🔥	●	●	🧊
		90	🧊	●	●	🧊
	5 mg/mL	90	🧊 🔥	●	●	🧊
Hydrocortisone ²²	1 mg/mL	90	🧊 🔥	●	●	🧊
Hydrocortisone hemisuccinate ¹	2 mg/mL	60	🧊 🔥	●	●	🧊
Hydrocortisone sodium phosphate ¹	2 mg/mL	60	🧊 🔥	●	●	🧊
Hydroxychloroquine sulfate*, 36, 37	25 mg/mL	90	🧊 🔥	●	●	●
	50 mg/mL	60	🧊 🔥	●	●	🧊
		90	🧊 🔥	●	●	●
		90	🧊 🔥	●	●	●
Ibuprofen	40 mg/mL	90	🧊 🔥	●	●	🧊
Imipramine HCl ⁵	5 mg/mL	90	🧊 🔥	●	●	🧊

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Active pharmaceutical Ingredient (API)	Concentration	Physical and chemical stability (days)	Storage	Physical and chemical stability (days) [§]	Physical and chemical stability (days) [§]	Storage
Indometacin	5 mg/mL	90				
Isoniazid ¹⁶	10 mg/mL	90				
Itraconazole ²²	20 mg/mL	90				
Ketoconazole ¹⁶	20 mg/mL	90				
Ketoprofen ³	20 mg/mL	90				
Labetalol HCl (tablets) ²²	40 mg/mL	90				
Lamotrigine ³	1 mg/mL	90				
Lansoprazole ¹⁸	2 mg/mL	●	●	●	●	●
Levodopa and carbidopa ⁵	5 / 1.25 mg/mL	60 / 30				
	10 / 2.5 mg/mL	90				
Levofloxacin ²⁰	50 mg/mL	90				
Levothyroxine Sodium (T4)	25 µg/mL	90				
Lisinopril (as dihydrate) ¹⁶	1 mg/mL	90				
Lomustine	4 mg/mL	90				
	10 mg/mL	90				
Loperamide HCl ¹⁷	1 mg/mL	90				
Lorazepam ⁵	1 mg/mL	90 / 60				
Mebeverine HCl ²¹	10 mg/mL	90				
Melatonin ²²	3 mg/mL	90				
Mercaptopurine (tablets) ²⁸	10 mg/mL	90				
Methadone HCl ²⁸	10 mg/mL	90				
Methotrexate ¹⁷	2.5 mg/mL	90				
Methyldopa	50 mg/mL	90				
Metoprolol tartrate ²⁰	10 mg/mL	90				
Metronidazole benzoate ⁷	80 mg/mL	90				
Midazolam (as HCl, injection fluid) ^{8, 19}	1 mg/mL	60				
Minocycline HCl ⁵	10 mg/mL	60				
Minoxidil	1 mg/mL	90 / 60				
Moxifloxacin	20 mg/mL	90				
Nadolol ^{***, 17}	10 mg/mL	90				
Naltrexone HCl ¹⁷	1 mg/mL	90				
Naproxen ¹⁶	25 mg/mL	90				
Nifedipine ¹	4 mg/mL	90				
Nitrendipine (tablets) ^{*, 24}	5 mg/mL	60				
Nitrofurantoin ^{****, 20, 29}	2 mg/mL	90				
	10 mg/mL	90				

Compatible combination

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Active pharmaceutical Ingredient (API)	Concentration	Physical and chemical stability (days)	Storage	Physical and chemical stability (days) [§]	Physical and chemical stability (days) [§]	Storage
Omeprazole** ^{9, 18}	2 mg/mL	●	●	●	60	🧊
	5 mg/mL	●	●	●	60	🧊
Ondansetron HCl ²⁰	0.8 mg/mL	90	🧊 🧊	●	●	🧊
Oseltamivir (as phosphate, capsules) ^{10, 19, 28}	6 mg/mL	90	🧊	●	●	🧊
	15 mg/mL	90	🧊	●	●	🧊
Oxandrolone ²⁰	3 mg/mL	90	🧊 🧊	●	●	🧊
Oxybutynin* ³²	5 mg/mL	8	🧊	●	●	●
Pantoprazole sodium** ¹⁸	3 mg/mL	●	●	●	60	🧊
Paracetamol (acetaminophen) ¹⁶	50 mg/mL	90	🧊 🧊	●	●	🧊
Penicillamine ³	50 mg/mL	90	🧊 🧊	●	●	🧊
Pentobarbital* ³⁸	25 mg/mL	●	●	●	120	🧊
Pentoxifylline ¹⁷	20 mg/mL	90	🧊 🧊	●	●	🧊
Phenobarbital ^{1, 28}	9 mg/mL	90	🧊 🧊	●	●	🧊
	15 mg/mL	90	🧊	●	●	🧊
Phenytoin* ^{2, 43}	5 mg/mL	60	🧊 🧊	●	●	🧊
	15 mg/mL	90	🧊 🧊	●	●	🧊
Prednisone* ²⁵	5 mg/mL	60	🧊	●	●	●
Prednisolone sodium phosphate ¹	1.5 mg/mL	30	🧊 🧊	●	●	🧊
Pregabalin ²⁰	20 mg/mL	90	🧊 🧊	●	●	🧊
Procarbazine* ^{41, 42}	10 mg/mL	30	🧊	●	●	🧊
		50*	🧊	●	●	🧊
Promethazine HCl	2 mg/mL	90	🧊 🧊	●	●	🧊
Propranolol HCl ^{11, 19, 28}	0.5 mg/mL	90	🧊	●	●	🧊
	1 mg/mL	90	🧊	●	●	●
	5 mg/mL	90	🧊	●	●	🧊
Propylthiouracil ²¹	5 mg/mL	90	🧊 🧊	●	●	🧊
Pyrazinamide* ^{26, 28}	100 mg/mL	90	🧊 🧊	●	●	🧊
Pyridoxine HCl (vit. B6) ²	50 mg/mL	90	🧊 🧊	●	●	🧊
Pyrimethamine* ⁴⁰	5 mg/mL	60	🧊	●	●	●
Quinidine sulfate ²¹	10 mg/mL	90	🧊 🧊	●	●	🧊
Rabeprazole ¹⁸	3 mg/mL	●	●	●	●	●
Ranitidine HCl ¹	14 mg/mL	58 / 36	🧊 🧊	●	●	🧊
Riboflavin (vit. B2) ²⁰	10 mg/mL	90	🧊 🧊	●	●	🧊
Rifampicin (rifampicin) ¹²	25 mg/mL	60	🧊 🧊	●	●	🧊
Sertraline HCl ¹⁶	10 mg/mL	90	🧊 🧊	●	●	🧊

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PH4 (liquid)
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**SyrSpend® SF
PH4 Neo (dry)
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**SyrSpend® SF
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Active pharmaceutical Ingredient (API)	Concentration	Physical and chemical stability (days)	Storage	Physical and chemical stability (days) [§]	Physical and chemical stability (days) [§]	Storage
Sildenafil citrate ³³	2.5 mg/mL	90				
Simvastatin ¹	1 mg/mL	90				
Sotalol HCl (tablets) ²⁸	5 mg/mL	90				
Spironolactone ^{*, 1, 28, 35, 43}	2 mg/mL	90				
	2.5 mg/mL	90				
	5 mg/mL	60				
	25 mg/mL	90				
Spironolactone and hydrochlorothiazide ²²	5/5 mg/mL	90				
Sulfadiazine ²	100 mg/mL	90				
Sulfasalazine ²	100 mg/mL	90				
Tacrolimus (as monohydrate) ^{5, 28}	0.5 mg/mL	90				
	1 mg/mL	90				
Temozolomide ^{*, 39}	20 mg/mL	60				
Terbinafine HCl ⁵	25 mg/mL	90				
Tetracycline HCl ²	25 mg/mL	90				
Thiamine HCl (vit. B1) ³	100 mg/mL	90				
Thioguanine ²⁹	2.5 mg/mL	90				
Tiagabine HCl (tablets) ²²	1 mg/mL	90 / 30				
Topiramate ²¹	5 mg/mL	90				
Tramadol HCl ^{*, 5, 31}	5 mg/mL	90				
	10 mg/mL	90				
	30 mg/mL	90				
Trimethoprim ²	10 mg/mL	90				
Ursodeoxycholic Acid ^{13, 28}	20 mg/mL	90				
	30 mg/mL	66				
Valsartan ⁵	4 mg/mL	90				
Vancomycin HCl ^{14, 28}	25 mg/mL	90				
	50 mg/mL	90				
Venlafaxine HCl	15 mg/mL	90				
Verapamil HCl ¹⁵	50 mg/mL	60				
Vinorelbine ^{*, 44}	10 mg/mL	56				
Warfarine sodium (tablets) ^{*, 27}	1 mg/mL	44 / 10				
Zonisamide ²	10 mg/mL	90				

Compatible combination

Combination not recommended

2-8 °C 15-25 °C Storage temperature

- § The physical and chemical stability of acid-stable APIs in SyrSpend® SF PH4 (dry) is expected to be similar to SyrSpend SF PH4 (liquid). The physical and chemical stability for acid-labile APIs in SyrSpend® SF ALKA (dry) are mentioned in the compatibility table. Note that SyrSpend® SF PH4 (dry) and SyrSpend® SF ALKA (dry) are both unpreserved. When compounding with these vehicles, the maximum beyond-use-date needs to be assigned, based on the pharmacist's own professional judgement and applicable legislation.
- * Study performed by independent scientific working groups without Fagron supervision. For a full list of all references, please be referred to: www.fagron.com/en/external-study-overview.
- ** Use raw pharmaceutical material for the API when compounding.
- *** Due to the high pH, sodium benzoate and sorbic acid are not effective as a preservative, therefore it should be considered unpreserved unless preservation is guaranteed otherwise.
- **** It is preferred to use raw pharmaceutical material for the API when compounding. Higher concentrations can thicken over time. If this happens, it is recommended to use 60% of the nominal quantity of SyrSpend® SF PH4 NEO or SyrSpend® SF PH4 dry to make the formulation. Please note that a watery layer can be formed, but upon shaking the suspending properties should be retained. For a complete overview of all nitrofurantoin formulations in SyrSpend® SF PH4, please consult the Fagron Formulary.

References

- Geiger CM, Sorenson B, Whaley P. Stability Assessment of 10 Active Pharmaceutical Ingredients Compounded in SyrSpend SF. *Int J Pharm Compd.* 2015;19:420-7.
- Ferreira AO, Polonini HC, Silva SL, Patrício FB, Brandão MA, Raposo NR. Feasibility of amlodipine besylate, chloroquine phosphate, dapsone, phenytoin, pyridoxine hydrochloride, sulfadiazine, sulfasalazine, tetracycline hydrochloride, trimethoprim and zonisamide in SyrSpend® SF PH4 oral suspensions. *J Pharm Biomed Anal* 2016;118:105-112.
- Polonini HC, Loures S, Lima LC, Ferreira AO, Brandão MAF. Stability of Atenolol, Clonazepam, Dexamethasone, Diclofenac Sodium, Diltiazem, Enalapril Maleate, Ketoprofen, Lamotrigine, Penicillamine-D and Thiamine in SyrSpend SF PH4 Oral Suspensions. *Int J Pharm Compd.* 2016;20:167-174.
- Geiger CM, Sorenson B, Whaley PA. Stability of Captopril in SyrSpend SF. *Int J Pharm Compd.* 2013;17:336-338.
- Polonini HC, Silva SL, Cunha CN, Brandão MAF, Ferreira AO. Compatibility of cholecalciferol, haloperidol, imipramine hydrochloride, levodopa/carbidopa, lorazepam, minocycline hydrochloride, tacrolimus monohydrate, terbinafine, tramadol hydrochloride, valsartan in SyrSpend® SF PH4 oral suspensions. *Pharmazie.* 2016;71:185-91.
- Sorenson B, Voudrie MA, Gehrig D. Stability of Gabapentin in SyrSpend SF. *Int J Pharm Compd.* 2012;16:347-349.
- Vu NT, Aloumanis V, Ben MJ, Kupiec TC, Patterson EK, Radke J, Erickson MA, Schneider G. Stability of Metronidazole Benzoate in SyrSpend SF One-step Suspension System. *Int J Pharm Compd.* 2008;12:558-564.
- Geiger CM, Sorenson B, Whaley PA. Stability of Midazolam in SyrSpend SF and SyrSpend SF Cherry. *Int J Pharm Compd.* 2013;17:344-346.
- Whaley PA, Voudrie MA, Sorenson B. Stability of Omeprazole in SyrSpend SF Alka (Reconstituted). *Int J Pharm Compd.* 2012;16:164-166.
- Voudrie MA, Allen B. Stability of Osetamivir Phosphate in SyrSpend SF, Cherry Syrup and SyrSpend SF (For Reconstitution). *Int J Pharm Compd.* 2010;14:82-85.
- Geiger CM, Voudrie MA, Sorensen B. Stability of Propranolol Hydrochloride in SyrSpend SF. *Int J Pharm Compd.* 2012;16:513-515.
- Sorenson B, Whaley P. Stability of Rifampin in SyrSpend SF. *Int J Pharm Compd.* 2013;17:162-164.
- Geiger CM, Voudrie MA, Sorenson B. Stability of Ursodiol in SyrSpend SF Cherry Flavored. *Int J Pharm Compd.* 2012;16:510-512.
- Whaley PA, Voudrie MA. Stability of Vancomycin in SyrSpend SF. *Int J Pharm Compd.* 2012;16:167-169.
- Voudrie MA, Alexander B, Allen B. Stability of Verapamil Hydrochloride in SyrSpend SF compared to Sorbitol containing syrup and suspending vehicles. *Int J Pharm Compd.* 2011;15:255-258.
- Polonini HC, Loures S, de Araujo ED, Brandão MAF and Ferreira AO. Stability of Allopurinol, Amitriptyline Hydrochloride, Carbamazepine, Domperidone, Isoniazid, Ketoconazole, Lisinopril, Naproxen, Paracetamol (Acetaminophen), and Sertraline Hydrochloride in SyrSpend SF PH4 Oral Suspensions. *Int J Pharm Compd.* 2016;20:426-434.
- Polonini HC, Silva SL, de Almeida TR, Brandão MAF and Ferreira AO. Compatibility of caffeine, carvedilol, clomipramine hydrochloride, folic acid, hydrochlorothiazide, loperamide hydrochloride, methotrexate, nadolol, naltrexone hydrochloride and pentoxifylline in SyrSpend SF PH4 oral suspensions. *Eur J Hosp Pharm.* 2016 (Published Online First).
- Polonini HC, Silva SL, Loures S, Almy R, Bolland A, Brandão MAF and Ferreira AO. Compatibility of proton pump inhibitors in a preservative-free suspending vehicle. *Eur J Hosp Pharm* 2016;0:1-7.
- Dijkers ECF, Nanhekan V, Thirissen A. Updated Stability Data of Midazolam, Osetamivir Phosphate, and Propranolol Hydrochloride in SyrSpend SF and Minoxidil in Espumil. *Int J Pharm Compd.* 2017;21:240-241.
- Ferreira AO, Polonini HC, Loures da Silva S, Cerqueira de Melo VA, de Andrade L and Brandão MAF. Stability of Alprazolam, Atropine Sulfate, Glutamine, Levofloxacin, Metoprolol Tartrate, Nitrofurantoin, Ondansetron Hydrochloride, Oxandrolone, Pregabalin, and Riboflavin in SyrSpend SF pH4 Oral Suspensions. *Int J Pharm Compd.* 2017;21:255-263.
- Polonini HC, Loures da Silva S, Buzinari Aglio NC, Abreu J, Brandão MAF and Ferreira AO. Stability of Acetazolamide, Baclofen, Dipyrindamole, Mebevarine Hydrochloride, Propylthiouracil, Quinidine Sulfate, and Topiramate Oral Suspensions in SyrSpend SF PH4. *Int J Pharm Compd.* 2017;21:339-346.
- Uriel M, Gómez-Rincón C, Marro, D. Stability of regularly prescribed oral liquids formulated with SyrSpend® SF. *Die Pharmazie.* 2018; 73:196-201.
- Barbazan C, Le Daré B, Lester MA and Boivin PN. Etude de stabilité d'une suspension buvable de cloxacilline à usage pédiatrique. Poster presentation at 11th Rencontres Convergences Santé Hôpital 2016.
- Bellay R, Lesourd F, Quilliec C, Gicquel T, Boivin PN and Lester MA. Stabilité d'une suspension buvable de nitrendipine 5 mg/mL. Poster presentation at 11th Rencontres Convergences Santé Hôpital 2016.
- Bonnaure AC, Bellay R, Rault P, Lester MA and Boivin PN. Stability study of 5 mg/ml pediatric prednisone oral suspension in SyrSpend®. 20th European GERPAC Conference 2017.
- Boivin P, Geffroy C, Tron C, et al PP-054 Stability study of 100 mg/ml paediatric pyrazinamide oral suspension in syrSpend. *Eur J Hosp Pharm* 2017;24:A225.
- Guillois G, Fetique L, Perovic I, et al PP-028 Stability study of 1 mg/ml paediatric warfarin oral suspension in syrSpend. *Eur J Hosp Pharm* 2017;24:A214.
- Polonini H, da Silva SL, Brandão MAF, Bauters T, De Moerloose B, Ferreira AO. Compatibility of Baclofen, Carvedilol, Hydrochlorothiazide, Mercaptopurine, Methadone Hydrochloride, Osetamivir Phosphate, Phenobarbital, Propranolol Hydrochloride, Pyrazinamide, Sotalol Hydrochloride, Spironolactone, Tacrolimus Monohydrate, Ursodeoxycholic Acid, and Vancomycin Hydrochloride Oral Suspensions Compounded with SyrSpend SF pH4. *Int J Pharm Compd.* 2018 Nov-Dec;22(6):516-526.
- Polonini H, da Silva SL, de Araújo EP, Ferreira AO, Anagnostou K, Dijkers ECF. Stability of Azathioprine, Clonidine hydrochloride, Clopidogrel bisulfate, Ethambutol hydrochloride, Griseofulvin, Hydralazine hydrochloride, Nitrofurantoin and Thioguanine oral suspensions compounded with SyrSpend® SF PH4. *Int J Pharm Compd.* 2020 May-June;24(3):252-262.
- Zanon D, Manca A, De Nicolò A, et al. Data on the stability of darunavir/cobicistat suspension after tablet manipulation [published online ahead of print, 2020 Apr 12]. *Data Brief.* 2020;30:105552.
- Espana B, Joseph-Tornabène F, Jaquet Cécile, Perrot S, Prouillac C. Stability of Extemporaneous Oral Tramadol, Fluoxetine, and Doxycycline Suspensions in SyrSpend SF PH4. *Int J Pharm Compd.* 2020 Jul-Aug;24(4):327-336.
- Lesourd F, Bellay R, Quilliec C, et al PP-036 Stability study of 5 mg/ml oxybutynin oral suspension in syrSpend *Eur J Hosp Pharm* 2016;23:A210.
- Geiger CM, Sorenson B, Whaley P. stability of sildenafil Citrate oral suspension with syrSpend® sf. *Eur. Pharm. J.* 2018, 65(1): 31-35.
- Adoum, A. et al. Physicochemical stability of 20 mg/mL amiodarone hydrochloride oral suspension in SyrSpend® SF PH4 (liquid). *Pharm Tech in Hosp Pharm*, vol. 7, no. 1, 2022, pp. 20220005.
- Binson G, et al. Preparation and Physicochemical Stability of Liquid Oral Dosage Forms Free of Potentially Harmful Excipients Designed for Pediatric Patients. *Pharmaceutics.* 2019 Apr 18;11(4):190.
- Binson G, et al. Preparation and physicochemical stability of 50 mg/mL hydroxychloroquine oral suspension in SyrSpend® SF PH4 (dry). *Int J Antimicrob Agents.* 2020 Dec;56(6):106201.
- An internal study by Fagron confirmed a 90 days beyond-use-date for Hydroxychloroquine sulfate 25 and 50 mg/ml.
- Querín, B, et al. Stability data of extemporaneous oral suspension of pentobarbital in SyrSpend SF Alka for imaging sedation procedure. *Data in Brief.* 35. 2021. 106884.
- Annereau M, et al. Development of a Hospital Compounded, Taste-Masked, Temozolomide Oral Suspension and 5-Year Real-Life Experience in Treating Paediatric Patients. *Pharmaceutics (Basel).* 2022 Apr 29;15(5):555.
- Stabilité d'une suspension buvable de pyriméthamine à 5 mg/ml à usage pédiatrique dans du SyrSpend SF PH4. M Faugier, T Goupil, PN Boivin, MA Lester. Pôle Pharmacie, UF pharmacotechnie-Stérilisation, CHU Rennes (PT154). CSH 2018, Rennes.
- Mansourian, M.; Dijkers, E.; Silva, C.C.V.; Polonini, H.C. Compatibility of Commonly Used Active Pharmaceutical Ingredients in a Ready-to-Use Oral Suspending Vehicle. *Pharmaceutics* 2023; 15: 2388.

42. Bravo, Pamela, Louise . Compositeur Bertin, Antonio T. Piñon, Lionel Tortolano, Thomas Fleury, Sandra Raimbault, Elisabeth Chachaty, Maxime Annereau and François Lemare. "Development and stability of an oral suspension of procarbazine in pediatrics." *Journal of Drug Delivery Science and Technology*, 2019.
43. Marco L, Troussier B, Binson G and Dupuis A. Stability of dexamethasone, hydrochlorothiazide, phenytoin and spironolactone oral suspensions compounded with additives-free suspending vehicle. GERPAC conference oral presentation. <https://www.gerpac.eu/stability-of-dexamethasone-hydrochlorothiazide-phenytoin-and-spironolactone-oral-suspensions-compounded-with-additives-free-suspending-vehicle>. Accessed October 2023.
44. Macqueron L, Regnier L, Robinet P, Leroy A-L, Lester M-A, Boivin P-N, Le Corre P. Development of vinorelbine oral formulations for pediatric use. GERPAC conference poster presentation. <https://www.gerpac.eu/development-of-vinorelbine-oral-formulations-for-pediatric-use>. Accessed October 2023.
45. Leroy L, Régnier A, Le Potier Cornen N, Jouan G, et al. 3PC-006 Stability study of clobazam liquid oral forms for paediatric patients. *European Journal of Hospital Pharmacy* 2024;31:A31. https://ejhp.bmj.com/content/31/Suppl_1/A31.1. Accessed March 2024.

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