

Save valuable time with batch preparation

Baxa is the only company to commit 20 years to coordinating extensive drug stability studies with its products. This allows you to prepare large batches and reduce the amount of time-consuming extemporaneous fills. From acetaminophen to Zantac®, stability studies ensure that drugs packaged in Baxa products remain stable until patient administration. Stabilities of drugs repackaged in Baxa Exacta-Med Oral Dispensers and Kwik-Vial containers have been tested by independent laboratories, using the latest methods and instrumentation. Check manufacturers' recommendations for drug storage.

The stability data represent testing for drugs stored in Exacta-Med dispensers and Kwik-Vial containers. Due to variations in materials and design, data is not valid for other manufacturers' dispensers or containers. This testing is presented as a customer service. Stability is defined per available USP specifications, or as less than 10% change in potency.

These data are intended as a guideline for appropriate product usage. Variables in customer use such as temperature, concentrations and storage conditions are beyond the control of Baxa Corporation and may affect stability. Contact Baxa Customer Support for copies of the complete Technical Information Reports.



Stability of Drugs in Baxa Exacta-Med Oral Dispensers

Generic Drug	Brand Name	Concentration mg/mL	Syringe Color	Days Stable at Room Temperature		
				Continuous Light	Continuous Dark	
Acetaminophen	Tylenol®	24	clear	—	75	
	Tylenol (adult)	33.3	amber	181	279	
		33.3	clear	181	279	
	Anacin-3®	32	clear	120	157	
	store brand (drops) [0.5 mL and 1 mL EM]	100	amber	12 mos	12 mos	
Amoxicillin	Augmentin®	100	clear	12 mos	12 mos	
		25	clear	4	—	
Amoxicillin	Larotid®	50	clear	3	—	
	Trimox®	25	clear	—	90	
		50	amber	36	79-R	
Ampicillin	Principen® store brand	50	clear	109	17	
		50	clear	—	79-R	
		25	amber	—	30	
		40	clear	271	—	
Antacid	Al(OH) ³ MG(OH) ² simethicone	40		271	—	
		40		271	—	
Betamethasone	Celestone®	4		271	—	
		3	clear	—	48	
		3	clear	—	48	
		5	amber	153	153	
		5	clear	153	74	
Calcium gluconate	Lyphomed®	5		—	153-R	
		94	amber	207	48	
		94	clear	207	89	
Carbamazepine	Tegretol	94	clear	—	207-R	
		20	amber	15 mos +	1 yr	
		20	clear	1 yr	13 mos-R	
Cefaclor	Ceclor®	50	amber	—	34-R	
		25	clear	—	90	
Cephalexin	Keflex®	50	amber	8	pending	
		50	clear	8	93-R	
Chloral hydrate	Noctec®	100	amber	15 mos	15 mos	
		100	clear	1 yr	1 yr	
Chlorpheniramine	Novahist DH®	0.4	clear	—	10 mos	
		2	amber	90	<58	
Chlorpromazine	Thorazine®	2	clear	<37	359	
		20	amber	101	101	
		20	clear	30	—	
		100	amber	5.5 mos	21 mos	
		100	clear	28	84	
Chlorothiazide	Diuril®	100	amber	4-13 mos	13 mos	
		100	clear	49	13 mos	
		50	amber	—	381	
Cimetidine	Tagamet®	50	clear	—	384	
		60	clear	—	180	
Cocaine	Lilly/saline	5%	amber	15 mos	15 mos	
		5%	clear	1 yr	15 mos	
		(with epinephrine)	10%	amber	8 mos + 3 dark	11 mos
			10%	clear	8 mos + 3 dark	141
		(in TAC solution)	5%	clear	154	154
Codeine Phosphate	Novahist DH	10%	clear	154	154	
		2	clear	—	10 mos	
Cyclosporin	Sandimmune®	100	clear	28	28	
		0.1	amber	—	388	
Dexamethasone	Decadron®	660	amber	—	59	
		660	clear	30	30	
Diatrizoate meglumine	MD-Gastroview	597	amber	—	270	
		597	clear	270	361	

Generic Drug	Brand Name	Concentration mg/mL	Syringe Color	Days Stable at Room Temperature	
				Continuous Light	Continuous Dark
Dicloxacillin	Dynapen®	12.5	clear	45	17
		2	amber	19 mos	358
Dicyclomine	Bentyl®	2	clear	19 mos	19 mos
		2.5	clear	90	180
Diphenhydramine	Benadryl®	0.05	amber	364	120
Digoxin	Lanoxin®	0.05	clear	364	—
		0.5	amber	69	—
Diphenoxylate	Lomotil®	10	amber	304	15 mos
		10	clear	376	18 mos
Doxepin HCl	PBI	10	amber	87	—
		10	clear	87	—
		0.2%	clear	90	154
Epinephrine	(in TAC solution)	25	amber	36	28
		25	amber	—	56-R
Erythromycin estolate	Ilosone®	25	clear	56	36
		25	clear	—	36-R
		40	amber	175	—
Erythromycin ethylsuccinate	Eryped®	40	amber	—	175-R
		40	clear	119	175
		40	clear	—	175-R
Erythromycin ethylsuccinate	Pediazole®	40	amber	54	54
		40	amber	—	62-R
		40	clear	21	54
Famotidine	Pepcid®	40	clear	—	54-R
		8	amber	33	—
		8	clear	96	70
Ferrous Sulfate	Fer-In-Sol®	3.6	amber	15 mos	368
		3.6	clear	—	210
Fluphenazine	Prolixin®	0.5	amber	—	90
		0.5	clear	38	—
Folic Acid	Folvite®	0.05	amber	31	31
		0.05	clear	31	—
Furosemide	Lasix®	10	amber	—	180
		10	clear	—	5 mos
Glubionate Ca	Neo-Calglucon®	360	amber	359	15 mos
		360	clear	359	—
Guaifenesin	Quibron®	6	amber	1 yr	1 yr
		6	clear	15 mos	15 mos
Haloperidol	Haldol®	2	amber	253	—
		2	clear	253	373
Hydrocodone	Ru-tuss®	10	clear	—	90
		5	clear	—	90
Hydroxyzine	Vistaril®	2	amber	1 yr	15 mos
		2	clear	16 mos	12 mos + 15-R
Ibuprofen	Pediaprofen®	20	amber	315	315
		20	clear	247	140
Iodine	Motrin, Children's	20	amber	97	—
		20	clear	30	97
Loperamide HCl	MD-Gastroview	367	amber	—	59
		367	clear	270	30
Loperamide HCl	Imodium-AD®	0.2	amber	18 mos	—
		0.2	clear	291	243
Loxipine HCl	Loxitane®	25	amber	15 mos	15 mos
		500	amber	8 mos	8 mos
Magnesium sulfate	Lyphomed	500	clear	8 mos	8 mos
		500	clear	8 mos-R	—
Meperidine	Demerol®	10	amber	15 mos	1 yr
		10	clear	1 yr	15 mos

Stability of Drugs in Baxa Exacta-Med Oral Dispensers (cont.)

Generic Drug	Brand Name	Concentration mg/mL	Syringe Color	Days Stable at Room Temperature			
				Continuous Light	Continuous Dark		
Metoclopramide Methadone	Reglan®	1	clear	186	238		
		2	amber	15 mos	65		
		2	clear	65	15 mos		
Methyldopa	Aldomet®	50	amber	371	371		
		Molindone HCl	Moban®	20	amber	372	—
				20	clear	248	372
Morphine HCl	M.O.S.	1	amber	15	15		
			clear	—	<21		
Morphine Sulfate	Roxane®	2	amber	242	238		
Multi-vitamins Ascorbic Acid(C)	Theragran® Vi-Daylin®	40	clear	—	58		
		35	clear	<56	—		
		35	clear	<63-R	—		
Cyanocobalamin (B ₁₂)	Gevraban® Vi-Daylin®	0.00003	clear	—	90		
		0.0015	amber	15	—		
		0.0015	clear	—	22		
		0.0015	clear	—	15-R		
Niacinamide	Gevraban Theragran Vi-Daylin	1.7	clear	—	90		
		20	clear	93	—		
		8	clear	56	63-R		
Pyridoxine (B ₆)	Gevraban Theragran Vi-Daylin	0.82	clear	30	—		
		0.4	clear	56	—		
Riboflavin Thiamine (B ₁)	Theragran Theragran Vi-Daylin	2	clear	—	58		
		20	clear	86	58		
Vitamin A	Vi-Daylin	0.5	amber	15	—		
		0.5#	clear	<56	22		
		0.5	clear	—	63-R		
		1500 IU	amber	15	—		
Vitamin D	Vi-Daylin	1500 IU	clear	<56	22		
		1500 IU	clear	—	63-R		
		400 IU	amber	15	—		
Nortriptyline	(refrigerated) Aventyl®	400 IU	clear	—	63-R		
		2	amber	13 mos	361		
		2	clear	13 mos	361		
Nystatin	Nilstat®	10000 IU	amber	289	148		
		10000 IU	clear	148	—		
Penicillin VK	Veetids 250	50	amber	<7	<7		
		50	amber	—	14-R		
		50	clear	<7	30-R		
		50	clear	<7	30-R		
Perphenazine	Trilafon®	3.2	amber	8 mos	12 mos		
		3.2	clear	< 8 mos	12 mos		
		20	clear	—	90		
Pheniramine Phenobarbital Phenylephrine Phenylpropanolam. Phenytol	Ru-Tuss Ru-Tuss NovahistDH Dilantin®	4	clear	—	90		
		30	clear	—	90		
		3.75	clear	—	10 mos		
		25	amber	363	180		
Potassium chloride	Lyphomed	25	clear	154	—		
		6	amber	—	180		
		149	amber	48	—		
		149	clear	207	207		
Potassium clavulanate	Augmentin	149	clear	—	207-R		
		6.25	clear	12 hrs	—		
		12.5	clear	8 hrs	—		
Promethazine	Phenergan®	5	amber	45	375		
		5	clear	31	310		
		0.25	clear	—	85-F		
		0.5	clear	—	66-F		
Prostaglandin E2	Prostin E2®	1.0/1.2	amber	—	2.5 mos-F		
		1.0/1.3	clear	—	4.5 mos-F		
		0.03	clear	—	90		
Pyrilamine	Ru-Tuss	0.03	clear	—	90		
		15	amber	250	—		
Ranitidine	Zantac®	15	amber	250	—		
		151	clear	—	250		
		42	amber	48	48		
		42	clear	214	116		
Sodium bicarbonate	Abbott	42	amber	48	48		
		42	clear	214	116		
		42	clear	—	116-R		
		23.5	clear	34	34		
Sodium chloride	Baxa lab Lyphomed	23.4%	amber	180	165		
		23.4%	clear	236	354		
		23.4%	clear	—	165-R		
		0.45%	clear	—	48		
Sodium chloride Sulfamethoxazole Sulfisoxazole	flush solution flush w. heparin Bactrim® Pediazole®	0.45%	clear	—	48		
		40	amber	18 mos	18 mos		
		120	amber	33	56		
			amber	—	62-R		
Tetracaine	(in TAC solution)		clear	21	56		
			clear	—	173-R		
		0.5%	clear	154	154		

Generic Drug	Brand Name	Concentration mg/mL	Syringe Color	Days Stable at Room Temperature	
				Continuous Light	Continuous Dark
Thioridazine	Mellaril-S®	5	amber	2 yrs	90
		5	clear	120	15 mos
		20	amber	102	381
	customer prep.	30	amber	100	100
		30	clear	100	100
		100	amber	15 mos	372
Thiothixene	Navane®	100	clear	240	15 mos
		5	amber	70	358
		5	clear	94	358
Trifluoperazine	Stelazine®	10	amber	31	241
		10	clear	14	304
Triflupromazine HCl		10	clear	—	48
Trimethoprim Valproic Acid	Bactrim Depakene®	8	amber	18 mos	18 mos
		50	amber	19 mos	19 mos
Vancomycin	VancoLed®	50	clear	19 mos	19 mos
		50	amber	54	—
		50	clear	133	67
		50	clear	—	133-R
		50	clear	—	133-F

Key:
R = Refrigerated
F = Frozen

 Stability of **Respiratory** Drugs in
Baxa Exacta-Med Oral Dispensers

Generic Drug	Brand Name	Concentration Mg/mL	Syringe Color	Days Stable at Room Temperature	
				Continuous Light	Continuous Dark
Albuterol	Ventolin®	5	amber	225	368
		5	clear	212	368
		0.042%	clear	—	18 mos
		0.083%	clear	—	18 mos
		0.1%in cromolyn	clear	—	19 mos
Albuterol/atropine	customer	0.1%in NaCl	clear	—	224
		1/0.33	amber	13 wks	21 wks
		1/0.33	clear	13 wks	21 wks
Albuterol/cromolyn	customer	0.83/0.033	clear	23	—
		0.83/0.067/0.67	clear	23	—
Albuterol/ dexamethasone	customer	0.83/0.067/0.33	clear	—	—
		21	clear	70	276
Aminophylline Metaproterenol	Alupent®	2	amber	303	310
		2	clear	182	237
		50	amber	42	—
		50	clear	63	—
Terbutilene	Brethine® Brethine private	(inhalation)	0.4%	clear	—
		0.6%	clear	—	18 mos
		0.25	clear	—	22 mos
		0.25	clear	26	—
Theophylline	Aquaphyllin® Elixophyllin® Quibron®	1	clear	3 mos	—
		1	amber	173	—
		1	clear	173	173
		1	clear	—	173-R
Aminophylline Metaproterenol	Alupent®	5.33	clear	180	—
		5.33	amber	—	180
		5.33	clear	—	90
		10	amber	1 year	1 year
		10	clear	15 mos	15 mos
		50	clear	133	67
50	clear	—	133-R		
50	clear	—	133-F		

Key:
R = Refrigerated
F = Frozen

Stability of Drugs in Kwik-Vial Unit Dose Containers

Generic Drug	Brand Name	Concentration mg/mL	Days Stable at Room Temperature	
			Continuous Light	Continuous Dark
Acetaminophen	Anacin 3	32	178	178
	Tylenol	33.3	15 mos	15 mos
Aminophylline	URL	21	270	248
Antacid	store brand			
Al(OH) ³		40	360	357
Mg(OH) ²		40	360	357
simethicone		4	360	357
Carbamazepine	Tegretol	20	12 mos	12 mos
Chloral hydrate	Noctec	100	27 mos	238
Chlorpromazine	Thorazine	2	58	58
	customer preparation	20	6 mos	6 mos
	Intensol	100	13 mos	13 mos
Cocaine	Lilly/saline	5%	12 mos	15 mos
with 1:1000 epinephrine		10%	8 mos + 3 dark	141
Cocaine	(in TAC)	5%	30	30
		10%	30	—
Dexamethoraphan	Tussin DM	3	216	185
Diatrizoate	MD-Gastroview	660	—	136
meglumine				
Diatrizoic acid	MD-Gastroview	597	210	—
Dicyclomine	Bentyl	2	19 mos	18 mos
Digoxin	Lanoxin	0.05	63	—
Docusate Na	Colace	10	178	15 mos
Doxepin	—	10	20 mos	—
	PBI	10	87	—
Famotidine	Pepcid	8	6 mos	64
Fluphenazine	Prolxin	0.5	13 mos	—
Guaifenesin	Tussin DM	20	216	185
	Quibron	6	12 mos	15 mos
Glubionate Ca	Neo-Calglucon	360	31	—
Haloperidol	Haldol	2	122	—
Hydroxizine	Atarax	2	12 mos	15 mos
Ibuprofen	Pediaprofen	20	315	211
	Motrin, Children's	20	101	—
Iodine	MD-Gastroview	367	210	136
Loperamide	Imodium AD	0.2	291	18 mos
Loxipine	Loxitane	25	372	15 mos
Meperidine	Demerol	10	12 mos	15 mos
Methadone	Roxane	2	15 mos	15 mos
Molindone HCl	Moban	20	372	372
Morphine sulfate	Roxane	2	—	91
Multi-vitamins				
Ascorbic acid (C)	Theragran	40	86	58
Niacinamide	Theragran	20	86	58
Pyridoxine (B ₆)	Theragran	0.82	86	—
Riboflavin	Theragran	2	86	58
Thiamine	Theragran	20	86	—
Nortriptyline	Aventyl	2	24 mos	361
Paregoric	Rugby	0.4	Do not store	—
Perphenazine	Trilafon	3.2	10 mos	15 mos
Phenytoin	Dilantin	25	21 mos	—
Promethazine	Phenergan	5	31	60
Ranitidine HCl	Zantac	15	151	12 mos
Sucralfate	Carafate	100		
(analyzed as sucrose octasulfate, 40mg/mL)	(40)	7 mos	7 mos	—
Sulfamethoxazole	Bactrim	40	21 mos	—
Tetracaine	(in TAC)	0.5%	30	—
		1%	30	—
Theophylline	Quibron	10	12 mos	15 mos
Thioridazine	Mellaril-S	5	18 mos	15 mos
	Mellaril	100	372	372
	PBI, 1.7 mL	30	126	126
	6.7 mL	30	126	126
	customer preparation	30	195	100
Thiothixene	Navane	5	19 mos	12 mos + 18 mos-R
Trifluoperazine	Stelazine	10	31	91
Trimethoprim	Bactrim	8	21 mos	—
Valproic acid	Depakene	50	361	15 mos