

DETERMINING THE QUALITY INDICATOR OF THE GLYCINE DRUG USING AN INFRARED SPECTROSCOPY DEVICE.

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Abstract: In many cases, the rules of storage of medicines may be violated, and low-quality medicines may be sold illegally. In such cases, it is important to determine the validity and stability of the composition of drugs. The use of spectroscopic analysis methods can be an acceptable solution to solve these problems.

Key words: qualitative analysis, chemical codes, mixtures, drug, ika spectroscopy, toxic, spectral analysis, spectrum.

Glycine (aminoacetic acid); excipients: sodium-carboxymethylcellulose (carmellose sodium) or water-soluble methylcellulose, magnesium stearate or calcium stearate. Glycine is a metabolic regulator, normalizes and activates protective inhibition processes in the central nervous system, reduces psycho-emotional stress, mental increases working capacity. Glycine has glycine- and GAMK-ergic, alpha-1-adenoblocking, antioxidant, antitoxic effects; controls the activity of glutamate (NMDA) receptors.

It easily enters most biological fluids and tissues of the body, including the brain; decomposes into water and carbon dioxide, its accumulation in tissues does not occur. In case of functional and organic lesions of the central nervous system accompanied by hyperexcitability, emotional lability and sleep disorders, children under 3 years old are given 0.5 tablets (0.05 g) 2-3 times a day for 7-14 days. then 0.05 g once a day for 7-10 days is prescribed. Daily dose - 0.1-0.15 g, course - 2.0-2.6 g. Children over 3 years old and adults 1 tablet 2-3 times a day, the course of treatment is 7-14 days. The course of treatment can be extended up to 30 days, if necessary, the course is returned after 30 days. In case of sleep disorders, glycine is prescribed 0.5-1.0 tablets 20 minutes before sleep or immediately before sleep (depending on age).

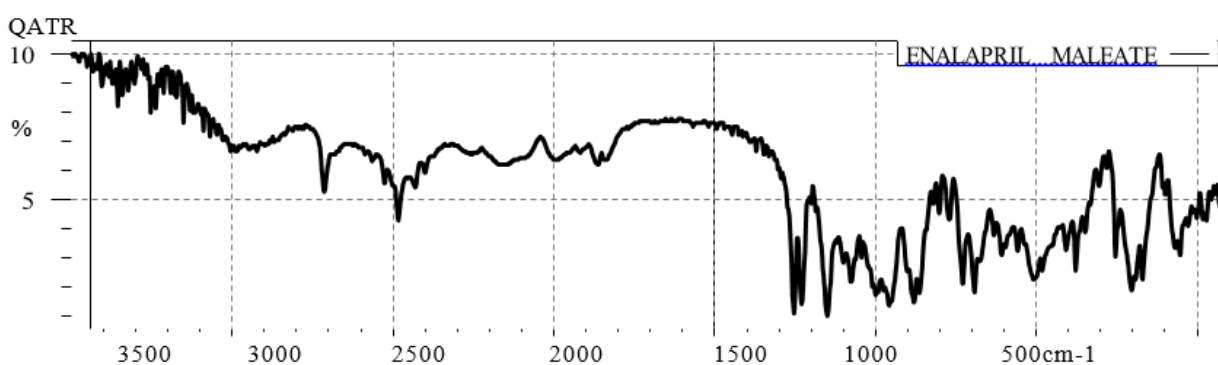
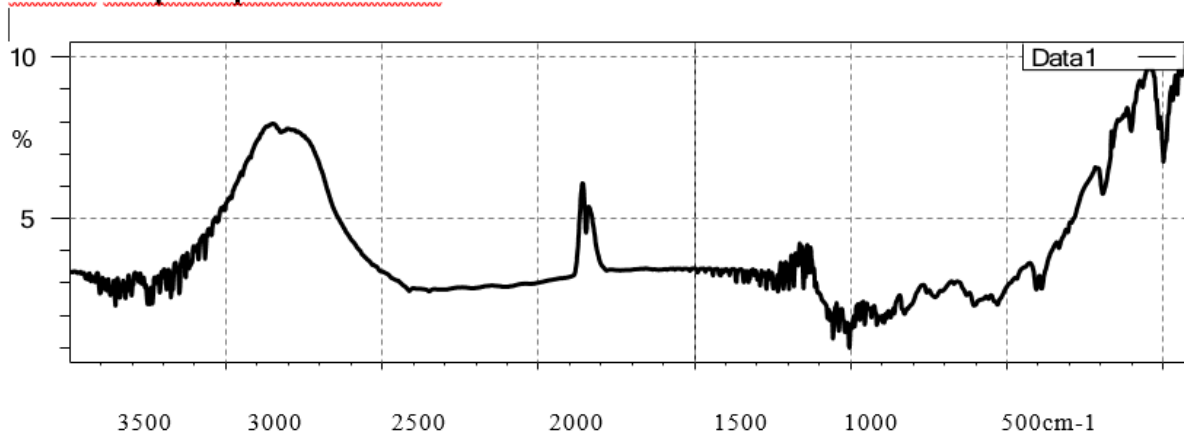
In case of ischemic brain stroke: during the first 3-6 hours of stroke development, 1 g, transbuccal or sublingual with one teaspoon of water, then 1 g for 1-5 days, 1-2 tablets 3 times a day for the next 30 days. In narcology, central and peripheral nervous system in organic injuries, during remission of encephalopathy cases, glycine is used 1 tablet 2-3 times a day, for 14-30 days, as a means of increasing mental work capacity and reducing tension. If necessary, treatment courses are repeated 4-6 times a year.

Antipsychotics (neuroleptics), anxiolytics, antidepressants, hypnotics and anticonvulsants reduce the side effects. hyperexcitability, emotional instability,

reduced mental capacity and sleep disorders: neuroses, neurotic conditions and vegeto-vascular dystonia, neuroinfections and consequences of brain injuries, perinatal and other forms of encephalopathies (including alcohol genesis), together with various functional and organic diseases of the nervous system. It is possible that medicines are not kept under standard controls for a long time, their contents may change due to expiration dates and other reasons.

To confirm this, it is necessary to carry out a number of chemical reactions or analyzes using special chromatographs. In short, this X-series Fourier Transform infrared calculation is a very time- and investment-intensive process. In order to avoid the use of IRSpirit-spectrophotometer, it can be successful. This can be proved by comparing the obtained result.

Glitsin IRSpirit-spektrofotometri:



	Score	Library	Name	Comment
1	615	58 - IRs Pharmaceuticals	ENALAPRIL MALEATE	ENALAPRIL MALEATE Formula; C ₂₄ H ₃₂ N ₂ O ₉ MW; 492.5248
2	610	177 - IRs Pharmaceuticals	Lysozyme Hydrochloride	Lysozyme Hydrochloride formula : C ₆₁ H ₉₆ N ₁₉ O ₁₈ S ₁₀ .x HCl
3	608	152 - IRs Pharmaceuticals	Bleomycin Hydrochloride	Bleomycin Hydrochloride formula : C ₅₅ H ₈₄ CIN ₁₇ O ₂₁ S.HCl

4	600	149 - IRs Pharmaceuticals	Cefaclor	Cefaclor formula : C15H14ClN3O4S
5	599	33 - T-Organic2	Fe Lactate	Fe(II) Lactate 3H2O
6	597	12 - IRs Pharmaceuticals	PHENETHICILLIN POTASSIUM	PHENETHICILLIN POTASSIUM Formula; C17H19KN2O5S
7	596	37 - T-Organic2	HumicAcid	HumicAcid Transmission
8	595	25 - T_FoodAdditives2	T_Benzyl Acetate-4	Benzyl Acetate(Sales origin; TOKYO CHEMICAL INDUSTRY
9	593	33 - ATR-Organic2	D_AcetylCellulose	AcetylCellulose
10	590	101 - IRs Pharmaceuticals	ALLOPURINOL	ALLOPURINOL Formula; C5H4N4O MW; 136.11 (WORKING
11	590	35 - T-Organic2	UREA	UREA Transmission
12	589	85 - IRs Pharmaceuticals	CEFTRIAZONE SODIUM CRS	CEFTRIAZONE SODIUM CRS Formula; C18H16N8Na2O7S3 MW; 508.53
13	589	23 - ATR-Organic2	D_butylAcrylate	n-Butyl Acrylate
14	587	25 - T-Organic2	PropyleneGlycol	PropyleneGlycol
15	585	1 - IRs Pharmaceuticals	PYRIDOXINE HCL	PYRIDOXINE HCL Formula; C8H11NO3.HCl MW; 205.64
16	584	133 - IRs Pharmaceuticals	Ceftriazone Sodium	Ceftriazone Sodium formula : C18H16N8Na2O7S3.7/2H2
17	584	23 - T-Organic2	EthyleneGlycol	EthyleneGlycol
18	583	167 - IRs Pharmaceuticals	Potassium Clavulanate	Potassium Clavulanate formula
19	583	26 - T-Organic2	DipropyleneGlycol	DipropyleneGlycol(mixture of isomers) Transmission
26	579	41 - T_FoodAdditives2	T_Microcrystalline Cellulose_101-4	Microcrystalline Cellulose(Product name; VIVAPUR101CSales origin; TOAKASEI
27	578	45 - IRs Pharmaceuticals	GLICLAZIDE	GLICLAZIDE Formula; C15H21N3O3S MW; 323.4092
28	578	27 - ATR-Organic2	D_Di-2-ethylhexylPhthalate	Di-2-ethylhexylPhthalate/DiethylhexylPhthalate
29	578	26 - ATR-Organic2	D_n-ButylPhthalate	n-ButylPhthalate
30	578	12 - ATR-Organic2	D_AdipicAcid	AdipicAcid DuraSamplIR
31	577	35 - IRs Pharmaceuticals	KETOCONAZOLE	KETOCONAZOLE Formula; C26H28Cl2N4O4 MW; 531.4376 (ASEAN REFERENCE STANDARD) CONTROL NO. T 197103
32	577	57 - ATR-Organic2	D_Y-13 Dis Azo Yellow	Dis Azo Yellow/C36H34Cl2N6O4, DuraSamplIR, Pig No. Y-13,
33	577	21 - T-Organic2	DiocetylPhthalate	Di-2-ethylhexylPhthalate/DiethylhexylPhthalate

34	576	157 - IRs Pharmaceuticals	Aclarubicin Hydrochloride	Aclarubicin Hydrochloride formula : C ₄₂ H ₅₃ NO ₁₅ .HCl ATR/diamond molecular
35	576	154 - IRs Pharmaceuticals	Benzylpenicilline Benzathine	Benzylpenicilline Benzathine formula : (C ₁₆ H ₁₈ N ₂ O ₄ S)C ₁₆ H ₂₀ N ₂ .4H
36	576	8 - IRs Pharmaceuticals	PIRACETAM	PIRACETAM Formula; C ₆ H ₁₀ N ₂ O ₂ MW; 142.15
37	576	20 - T-Organic2	n-ButylPhthalate	n-ButylPhthalate
38	576	30 - T-Organic2	Mg Stearate	Mg Stearate Transmission
39	574	95 - IRs Pharmaceuticals	ATENOLOL	ATENOLOL Formula; C ₁₄ H ₂₂ N ₂ O ₃ MW; 266.34 (ASEAN REFERENCE STANDARD) CONTROL
40	574	2 - T-Organic2	Sucrose	Sucrose Transmission

In conclusion, it can be said that using this method, it is possible to prove that mixtures with the same composition are qualitatively and quantitatively similar. For this, it is necessary to determine the mixture in different aggregate states or the mixture of drugs with qualitatively and quantitatively accurate composition analysis. we can compare.

REFERENCES:

1. Botirovich R. S., G'aybullayevna S. G. OLTI ATOMLI SPIRT-SORBITNING QANDLI DIABET KASSALIGINI DAVOLASHDAGI AHAMIYATI //ZAMONAVIY TA'LIMDA FAN VA INNOVATION TADQIQOTLAR JURNALI. – 2023. – T. 1. – №. 2. – С. 74-82.
2. Niyazov L., Karimov J. THE SIGNIFICANCE OF SITUATION ISSUES IN TEACHING MEDICINAL CHEMISTRY STUDENTS OF MEDICAL UNIVERSITIES //" CANADA" INTERNATIONAL CONFERENCE ON DEVELOPMENTS IN EDUCATION, SCIENCES AND HUMANITIES. – 2023. – T. 9. – №. 1.
3. Karimov J.S. TRIPTOFAN BIOKIMYOVIY REAKSIYALARINI O'RGANISH UNIVOZIYATI VA ORGANIK SINTEZLARDA FOYDALANISHNI ANQLASH //OBRAZOVANIE NAUKA I INNOVATIONNYE IDEI V MIRE. – 2023. – T. 34. – №. 6. – S. 120-124.
4. Karimov J. S. GIDROKSI BENZOY KISLOTALAR VA FLOVANOIDLARNING MERIGOLDLAR TARKIBIDA UCHRASHI VA AHAIYATI //JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH. – 2023. – T. 6. – №. 11. – С. 100-104.
5. Karimov J. S. ИЗУЧЕНИЕ ЗНАЧЕНИЯ БАЛХОТКОВ В МЕДИЦИНЕ С ПОМОЩЬЮ ФИЗИКО-ХИМИЧЕСКИХ МЕТОДОВ //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 34. – №. 6. – С. 131-135.
6. Karimov J. S. ВЛИЯНИЕ НА ЧЕЛОВЕЧЕСКИЙ ОРГАНИЗМ БИОХИМИЧЕСКИЕ РЕАКЦИИ ДЛЯ ТРИПТОФАНА //ОБРАЗОВАНИЕ

НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 34. – №. 6. – С. 125-130.

7. JS K. DETERMINATION OF TOXICITY LEVEL OF (2S)-2-AMINO-3-(1H-INDOL-3-YL) PROPANOIC ACID USING MOLECULAR MODELING FRAMEWORKS //Scientific Impulse. – 2023. – Т. 1. – №. 9. – С. 1020-1023.

8. Obidovich M. S. THE USAGE OF MODERN TEST SYSTEMS WHILE TEACHING THE SUBJECT OF MEDICAL CHEMISTRY //Лучшие интеллектуальные исследования. – 2023. – Т. 11. – №. 2. – С. 194-197.

9. Каримов, Жавохир Собирзода. "Ниязов Лазиз Нурхонович ПРОИЗВОДНЫЕ ТИОМОЧЕВИНЫ С ГИДРОКСИБЕНЗОЙНЫМИ КИСЛОТАМИ Universum химия и биология. 2021. № 8 (86)." URL <https://cyberleninka.ru/article/n/proizvodnye-tiomocheviny-s-gidroksibenzoynymi-kislotami> (2021).