

## THE SIGNIFICANCE OF SPECTRAL ANALYSIS IN DETERMINING THE COMPOSITION OF DRUGS

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**Abstract:** Cases of illegal sale of low-quality drugs, violations of the rules of storage of drugs are still encountered. In such cases, it is important to determine the authenticity and stability of the drug composition. The use of spectroscopic analysis methods can be an acceptable solution to solve these problems.

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

Mezim forte is used in the disorder of the production of digestive enzymes in the pancreas, which is accompanied by indigestion. Such disorders can be caused by, for example, chronic pancreatitis or cystic fibrosis, which in turn lead to poor absorption of nutrients.

When the abdomen is at rest (flatulence and gastrocardiac syndrome), especially after operations on the stomach and intestines, in the acceleration of the passage of food masses through the intestine of a functional nature (hyperexcitability, intestinal diseases of an infectious nature), liver / gall bladder in digestive disorders accompanied by loss of appetite, belching, vomiting and diarrhea (dyspepsia), when difficult-to-digest vegetables, fatty and unusual foods are consumed at the same time.

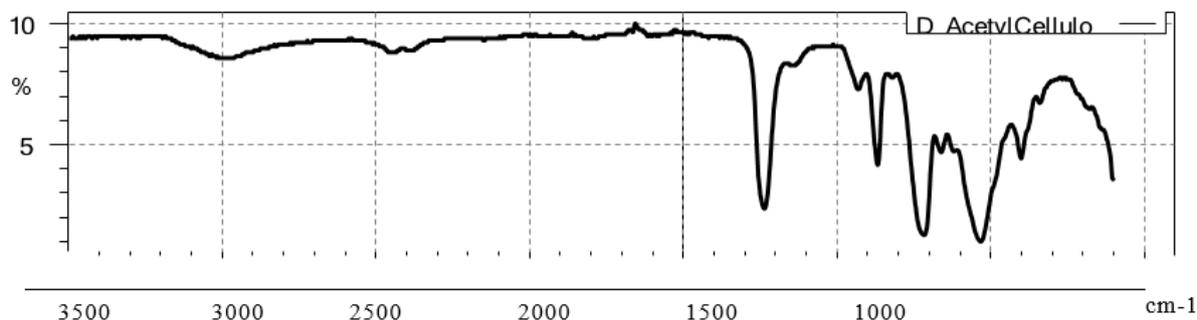
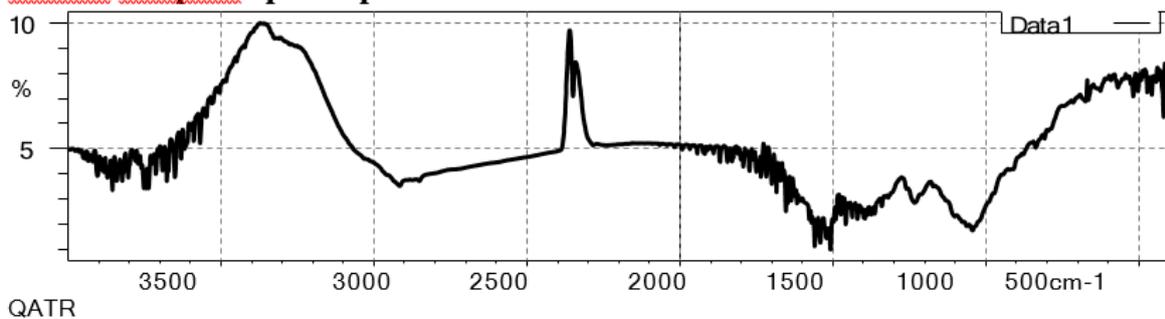
Mezim forte, as well as It can be used to relax the abdomen due to indigestion (flatulence), to remove gases from the intestine before conducting diagnostic procedures (x-ray, ultrasound examinations).

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. additional intake of folic acid may be required. The hypoglycemic effect of acarbose and miglitol (oral antidiabetic drugs) may decrease when used simultaneously with Mezim forte.

1 film-coated tablet contains pancreatin, an active substance with minimal activity

lipase	3500 TB Ph.Eur.
amylase	4200 TB Ph.Eur.
protease	250 TB Ph.Eur.

**Mezim IRSpirit-spectrophotometer:**



	Score	Library	Name	Comment
1	626	33 - ATR-Organic2	D_AcetylCellulose	AcetylCellulose DuraSamplIR
2	608	125 - IRs Pharmaceuticals	Enviomycin Sulfate	Enviomycin Sulfate formula : C50H92N26O32S3  ATR/diamond molecular weight
3	608	27 - T-Organic2	AcetylCellulose	AcetylCellulose Transmission
4	606	158 - IRs Pharmaceuticals	Acetylspiramycin	Acetylspiramycin formula : C47H78N2O16 ATR/diamond molecular weight : 927.13
5	600	44 - ATR-Organic2	D_Lecithin	Lecithin DuraSamplIR
6	598	62 - T_FoodAdditives2	T_Liquid Paraffin-4	Liquid Paraffin(Sales origin;Wako Pure Chemical Industries, Ltd.)@Between
7	597	151 - IRs Pharmaceuticals	Bleomycin Sulfate	Bleomycin Sulfate formula : C55H84N17O21S3  ATR/diamond molecular weight
8	596	69 - IRs Pharmaceuticals	DESOXYCORTONE ACETATE	DESOXYCORTONE ACETATE  Formula; C23H32O4 MW; 372.5  (INTERNATIONAL CHEMICAL REFERENCE SUBSTANCE) CONTROL NO.167007
9	596	12 - ATR-Organic2	D_AdipicAcid	AdipicAcid DuraSamplIR
10	595	23 - ATR-Organic2	D_butylAcrylate	n-Butyl Acrylate DuraSamplIR
11	594	58 - IRs Pharmaceuticals	ENALAPRIL MALEATE	ENALAPRIL MALEATE Formula; C24H32N2O9 MW; 492.5248  (ASEAN REFERENCE STANDARD) CONTROL

12	592	22 - T_FoodAdditives2	T_Candelilla Wax-4	Candelilla Wax(Sales origin:MIKI CHEMICAL INDUSTRY &
13	592	39 - T_FoodAdditives2	T_Paraffin Wax-4	Paraffin Wax(Product name:PW-3501CSales origin:MACHIDA CANDLE CO.LTD)@Film
14	592	10 - ATR-Organic2	D_Paraffin	Liquid Paraffin DuraSamplIR
15	591	55 - T_FoodAdditives2	T_Microcrystalline Wax-4	Microcrystalline Wax(Product name:MW-0055CSales origin:MACHIDA CANDLE CO.LTD)@Film
16	590	171 - IRs Pharmaceuticals	Penlomycin Sulfate	Penlomycin Sulfate formula : C61H88N18O21S2.H2SO4 ATR/diamond_molecular
17	590	22 - ATR-Organic2	D_EthylAcrylate	Ethyl Acrylate DuraSamplIR
18	589	37 - T-Organic2	HumicAcid	HumicAcid Transmission
19	588	30 - T-Organic2	Mg Stearate	Mg Stearate Transmission
20	588	19 - T_FoodAdditives2	T_Carnauba wax-4	Carnauba wax(Sales origin:Wako Pure Chemical Industries,
21	588	35 - ATR-Organic2	D_StearateCa	Ca Stearate DuraSamplIR
22	587	13 - T-Organic2	StearicAcid	StearicAcid Transmission
23	587	31 - ATR-Organic2	D_PropyleneGlycol	PropyleneGlycol DuraSamplIR
24	585	10 - T-Organic2	Paraffin	Liquid Paraffin Transmission
25	585	11 - T-Organic2	LauricAcid	LauricAcid Transmission
26	584	38 - ATR-Organic2	Li StearateLi	Li Stearate DuraSamplIR
27	584	36 - ATR-Organic2	D_StearateMg	Mg Stearate DuraSamplIR
28	583	40 - T-Organic2	T_olive oil	olive oil Transmission(Microscope
29	583	34 - ATR-Organic2	D_StearateNa	Na Stearate DuraSamplIR
30	583	38 - T-Organic2	Lecithin	Lecithin Transmission
31	583	31 - T-Organic2	Zn Stearate	Zn Stearate Transmission
32	582	44 - T-Organic2	T_margarine	margarine Transmission(Microscope
33	582	43 - T-Organic2	T_butter	butter Transmission(Microscope
34	582	41 - T-Organic2	T_sesame oil	sesame oil Transmission(Microscope
35	581	42 - T-Organic2	T_cooking oil-Diacylglycerol	cooking oil(Diacylglycerol) Transmission(Microscope
36	581	32 - T-Organic2	Li Stearate	Li Stearate Transmission
37	579	33 - T-Organic2	Fe Lactate	Fe(II) Lactate 3H2O Transmission
38	579	32 - ATR-Organic2	D_DipropyleneGlycol	DipropyleneGlycol(mixture of isomers) DuraSamplIR
39	579	26 - T_FoodAdditives2	T_Linalyl Acetate-4?	Linalyl Acetate(Sales origin:Wako Pure Chemical Industries, Ltd.)@Between Salts(KBr)
40	579	24 - ATR-Organic2	D_DimethylPhthalate	DimethylPhthalate

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.

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