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**General rules for infrared
spectrophotometric analysis**

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In the event of any doubts arising as to the contents,
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Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus	2
4.1 General	2
4.2 Infrared spectrophotometer	4
4.3 Accessories	9
4.4 Additional functions	17
5 Sample preparation	21
5.1 Notes	21
5.2 Solid samples	21
5.3 Powder samples	23
5.4 Liquid samples	23
5.5 Gaseous samples	24
6 Operation procedures	24
6.1 Installation of apparatus	24
6.2 Measurement procedures	25
6.3 Correction and inspection methods of spectrophotometer	26
7 Qualitative analysis	27
7.1 Method based on analysis of absorption spectrum	28
7.2 Method based on comparison with the spectrum of known compound	28
8 Quantitative analysis	29
8.1 Determination method	29
8.2 Expression of determination values	31
9 Guarantee of quality of data	31
9.1 General	31
9.2 Checks on apparatus	31
9.3 Performance validation of apparatus	31
9.4 Optimum method of sample preparation	32
9.5 Quality control of data obtained in quantitative analysis	32
10 Safety and maintenance	33
10.1 Safety	33
10.2 Maintenance	34
11 Record of measurement details	34

12	Matters to be included in individual standards	34
12.1	Qualitative analysis	34
12.2	Quantitative analysis.....	35

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Analytical Instruments Manufacturers' Association (JAIMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS K 0117:2000** is replaced with this Standard.

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General rules for infrared spectrophotometric analysis

1 Scope

This Japanese Industrial Standard specifies the general rules applicable to the qualitative analysis and quantitative analysis of inorganic and organic substances using infrared spectrophotometer¹⁾.

Note ¹⁾ In a broad definition, the term “infrared rays” means electromagnetic waves having wavelength between visible ray and microwaves. In this Standard, however, it is treated as rays in the wavenumber range of 4 000 cm⁻¹ to 400 cm⁻¹ (wavelengths 2.5 μm to 25 μm).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 0050 *General rules for chemical analysis*

JIS K 0211 *Technical terms for analytical chemistry (General part)*

JIS K 0212 *Technical terms for analytical chemistry (optical part)*

JIS K 0215 *Technical terms for analytical chemistry (Analytical instrument part)*

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in **JIS K 0211**, **JIS K 0212** and **JIS K 0215**, and the following apply.

3.1 interferogram

diagram expressing the signals sent from Michelson interferometer, obtained by plotting the optical path difference of light on abscissa and the light intensity on ordinate

3.2 apodization

mathematical operation to overlap the adequate function on interferogram, in order to reduce the spectrum distortion caused by the finite scanning distance of interferometer

3.3 absorbance

numerical value²⁾ expressed by the common logarithm of the ratio between the intensity (I_0) of the incident light directed at a sample and the intensity (I) of the light transmitted through it

Note ²⁾ Absorbance (Abs) is expressed as follows.

$$\text{Absorbance (Abs)} = -\log_{10}(I/I_0)$$