

# 室内空気に係わる ISOとJISの全体概要

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# ISO/TC146の組織



# Members of SC 6 "Indoor Air"

## P – Members (19)

Australia	SA	Italy	UNI	Spain	AENOR
Austria	ASI	Japan	JISC	Sweden	SIS
Belgium	NBN	Korea	KATS	Switzerland	SNV
Canada	SCC	Malaysia	DSM	USA	ANSI
Finland	SFS	The Netherlands	NEN	United Kingdom	BSI
France	AFNOR	Poland	PKN		
Germany	DIN	Russia	GOST R		

## O – Members (8)

Denmark	DS	<b>Sri Lanka</b>	<b>SLSI</b>
India	BIS	Thailand	TISI
Romania	ASRO	Turkey	TSE
Slovakia	SUTN	Ukraine	DSSU

## L – Members (4)

ISO/TC 22 "Road vehicles"  
**ISO/TC 35 "Paints and varnishes"**  
ISO/TC 219 "Floor coverings"  
ISO/TC 158 "Analysis of gases"  
CEN/TC 386 "Photocatalysis"

# JISとISOの関係

## その1 - 建材等からの放散 <13規格: 経産省所管>

デシケータ法

A1460:2001 (デシケータ法) <ホ>  
※2006.11確認

-----【対応ISOなし】

凡例  
ホ・・・ホルムアルデヒド  
V・・・VOC  
カ・・・他のカルボニル化合物  
S・・・SVOC

チャンバ法

A1901:2009 (小形チャンバ法) <ホ・V・カ>  
※2009.4改正

A1911:2006 (大形チャンバ法) <ホ>  
※2006.12制定

A1904:2008 (マイクロチャンバ法) <S>  
※2008.2制定

A1912:2008 (大形チャンバ法) <V・カ>  
※2008.2制定

→【ISO16000-25】  
※日本から提案  
←【ISO16000-9:2006】  
※ISOではチャンバの容積(大形・小形)による区分なし

A1902-1:2006 (試験条件等-ボード類等)  
A1902-2:2006 ( // -接着剤) <ホ・V・カ>  
A1902-3:2006 ( // -塗料等)  
A1902-4:2006 ( // -断熱材)  
※2006.12制定

-----【ISO16000-11:2006】

吸着(低減)性能

A1905-1:2007 (低減性能-供給法) <ホ>  
※2007.2制定

→【ISO16000-23:2009】  
※日本提案でIS化

A1905-2:2007 (低減性能-放散建材法) <ホ>  
※2007.2制定

-----【対応ISOなし】

A1906:2008 (低減性能-供給法) <V・カ>  
※2008.2制定

→【ISO16000-24:2009】  
※日本提案でIS化

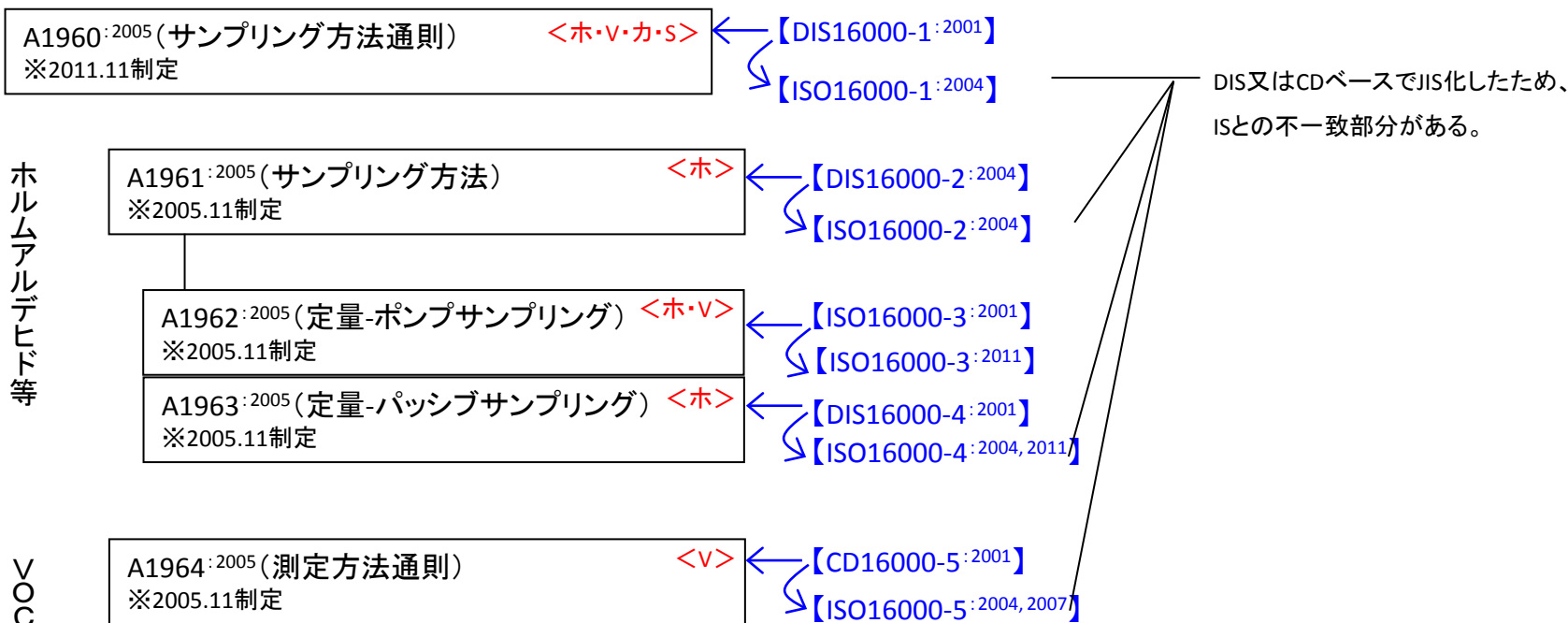
簡易法

A1903:2008 (パッシブ法) <V>  
※2008.2制定

-----【対応ISOなし】

# JISとISOの関係

## その2 - 室内空気<10規格: 国交省所管>



ホルムアルデヒド等

COV

		加熱脱離		溶媒抽出
(定量・分析方法)	ポンプ (Tenax-TA管)	A1965:2005 ※2005.11制定	<V> ←【ISO16000-6:2004】 ↳【ISO16000-6:20011】	—
	ポンプ	A1966:2005 ※2005.11制定	<V> ←【ISO16017-1:2000】	A1968:2005 ※2005.11制定 <V>
	パッシブ	A1967:2005 ※2005.11制定	<V> ←【FDIS16017-2:2002】 ↳【ISO16017-2:2003】	A1969:2005 ※2005.11制定 <V>

# ISO基準一覧(1)

(2012.9 時点)

ISO	分類	Title	対応JIS
16000-1 (IS 2004)	サンプリング通則	<i>General aspects of sampling strategy (ISO EN)</i>	A 1960 (2005)
16000-2 (IS 2004)	サンプリング	<i>Sampling strategy for formaldehyde (ISO EN)</i>	A 1961 (2005)
16000-3 (IS 2011, IS 2001改訂)	サンプリング	<i>Active sampling method for formaldehyde and other carbonyl compounds in indoor and test chamber air (2011-10-15)</i>	A 1962 (2005)
16000-4 (IS 2011, IS 2004改訂)	サンプリング	<i>Diffusive sampling method for formaldehyde (2011-12-01)</i>	A 1963 (2005)
16000-5 (IS 2007)	サンプリング	<i>Sampling strategy for volatile organic compounds (VOCs) (ISO EN)</i>	A 1964 (2005)

- IS : International Standard (国際規格)
- DIS : Draft International Standard (国際規格案)
- WD : Working Draft (作業草案)
- NP : New Proposal (新案)

# ISO基準一覽(2)

ISO	分類	Title	対応JIS
16000-6 (IS 2011, IS 2004改訂)	分析	<i>Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA<sup>®</sup> sorbent, thermal desorption and gas chromatography using MS or MS-FID (2011-12-01)</i>	A 1965 (2007)

# ISO基準一覧(3)

ISO	分類	Title	対応JIS
16000-7 (IS 2007)	アスベスト	<i>Sampling strategy for determination of airborne asbestos fibre concentrations (ISO EN)</i>	
16000-8 (IS 2007)	空気齢	<i>Determination of local mean ages of air in buildings for characterizing ventilation conditions</i>	
16000-9 (IS 2006)	チャン バー	<i>Determination of the emission of volatile organic compounds from building products and furnishing – Emission test chamber method (ISO EN)</i>	A 1901 (関連JIS: A1911,1912)
16000-10 (IS 2006)	FLEC	<i>Determination of the emission of volatile organic compounds from building products and furnishing – Emission test cell method (ISO EN)</i>	



# ISO基準一覽(4)

ISO	分類	Title	対応JIS
16000-11 (IS 2006)	試料 準備	<i>Determination of the emission of volatile organic compounds from building products and furnishing – Sampling, storage of samples and preparation of test specimens (ISO EN)</i>	(関連JIS: A 1902 -1,2,3,4
16000-12 (IS 2008)	PCB	<i>Sampling strategy for polychlorinated biphenyls (PCBs), polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzo-furans (PCDFs) and polycyclic aromatic hydrocarbons (PAHs) (ISO EN)</i>	
16000-13 (IS 2008)	PCB	<i>Determination of total (gas and particle-phase) polychlorinated dioxin-like biphenyls (PCBs) and polychlorinated dibenzo-p-dioxins/dibenzofurans (PCDDs/PCDFs) – Collection on sorbent-backed filters</i>	
16000-14 (IS 2009)	PCB	<i>Determination of total (gas and particle-phase) polychlorinated dioxin-like biphenyls (PCBs) and polychlorinated dibenzo-p-dioxins/dibenzofurans (PCDDs/PCDFs) – Extraction, clean-up and analysis by high-resolution gas chromatography and mass spectrometry</i>	
16000-15 (IS 2008)	NO2	<i>Sampling strategy for nitrogen dioxide (NO<sub>2</sub>) (ISO EN)</i>	

# ISO基準一覧(5)

ISO	分類	Title	対応JIS
16000-16 (IS 2008)	カビ	<i>Detection and enumeration of moulds – Sampling by filtration</i>	
16000-17 (IS 2008)	カビ	<i>Detection and enumeration of moulds – Culture based method</i>	
16000-18 (IS 2011)	カビ	<i>Detection and enumeration of moulds – Sampling by impaction (2011-07-01)</i>	
16000-19 (IS 2012)	カビ	<i>Sampling strategy for moulds (2012-06-01)</i>	
16000-20 (NP)	カビ	<i>Detection and enumeration of moulds - Determination of total spore count→検討中</i>	

# ISO基準一覽(6)

ISO	分類	Title	対応JIS
16000-21 (DIS)	カビ	<i>Detection and enumeration of moulds – Sampling from materials</i>	
16000-22 (PWI)	カビ	<i>Detection and enumeration of moulds – Molecular methods</i>	
16000-23 (IS 2009)	吸着 建材	<i>Performance test for evaluating the reduction of formaldehyde concentrations by sorptive building materials</i>	A 1905-1 (2007)
16000-24 (IS 2009)	吸着 建材	<i>Performance test for evaluating the reduction of volatile organic compounds (except formaldehyde) concentrations by sorptive building materials</i>	A 1906 (2008)
16000-25 (IS 2011)	SVOC	<i>Determination of the emission of semi-volatile organic compounds by building products - Micro chamber method (2011-07-01)</i>	A1904 (2008)

# ISO基準一覧(7)

ISO	分類	Title	対応JIS
16000-26 (IS 2012)	CO2	<i>Sampling strategy for carbon dioxide (CO2) (ISO EN) (2012-08-01)</i>	
16000-27 (DIS)	アスベスト	<i>Determination of settled fibrous dust on surfaces by SEM (scanning electron microscopy) (direct method)</i>	
16000-28 (IS 2012)	におい	<i>Sensory evaluation of emissions from building materials and products (2012-03-15)</i>	
16000-29 (DIS)	VOC 検出器	<i>Test method for VOC detectors</i>	
16000-30 (DIS)	におい	<i>Sensory test of indoor air</i>	
16000-31 (DIS)	難燃剤 可塑剤	<i>Measurement of flame retardants and plasticizers based on organophosphorus compounds – Phosphoric acid ester</i>	

# ISO基準一覧(8)

ISO	分類	Title	対応JIS
16000-32 (DIS)	建設	<i>Investigation of constructions on pollutants and other injurious factors – Inspections (ISO EN)</i>	
16017-1 (IS 2000)	サンプリング	<i>Indoor, ambient air and workplace air – Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography – part 1 : Pumped sampling (ISO EN)</i>	A 1966 (2005)
16017-2 (IS 2003)	サンプリング	<i>Indoor, ambient air and workplace air – Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography – part 2 : Diffusive sampling (ISO EN)</i>	A 1967 (2005)

# ISO基準一覽(9)

ISO	分類	Title	対応規格
12219-1 (IS, 2012)	自動車	<i>Whole vehicle test chamber – Specification and method for the determination of VOCs in car interiors</i>	JAMA
12219-2 (IS 2012)	自動車	<i>Bag method (screening method)</i>	JASO M 902(2007)
12219-3 (IS 2012)	自動車	<i>Micro-chamber method</i>	
12219-4 (FDIS)	自動車	<i>Small chamber method</i>	
12219-5 (DIS)	自動車	<i>Static chamber method</i>	

# ISO基準一覧(10)

ISO	分類	Title	対応JIS
12219-6 (NP)	自動車	<i>Determination of semi-volatile organic compounds from vehicle interior parts and materials - Small chamber method</i>	
12219-7 (NP)	自動車	<i>Odour determination of interior air from vehicle interior parts and materials and test chamber air of trim components by olfactory</i>	
28360 (IS/IEC)	事務機器	事務機器—オゾン, 揮発性有機化合物及び粉じんの放散速度測定方法	X 6936 (2005, 2011)
28360 (IS/IEC)	電子機器	電子機器からの揮発性有機化合物(VOC)及びカルボニル化合物放散測定方法—チャンバー法	C 9913 (2008)

# EN CEN/TC 351 と欧州ラベリング

- Construction products — Assessment of emissions of regulated dangerous substances from construction products — Determination of emissions into indoor air
- ENで建材の水平規格が検討されている
- フランスでは、2012年1月からTVOCを含むラベル表示が義務

