



Danish Indoor Climate Label

- introduction, status and future

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Danish Indoor Climate Labelling

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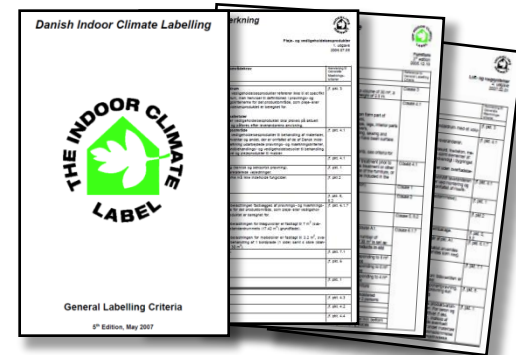
Background

- 1993: Development of labelling scheme requested by the Ministry of Housing and Urban Affairs
- Objective: To reduce emissions from building materials and products used indoors
- Secretariat hosted by the Danish Technological Institute
- 1995: First labelling licenses issued
- 2009: More than 2000 individual products covered by labelling licenses

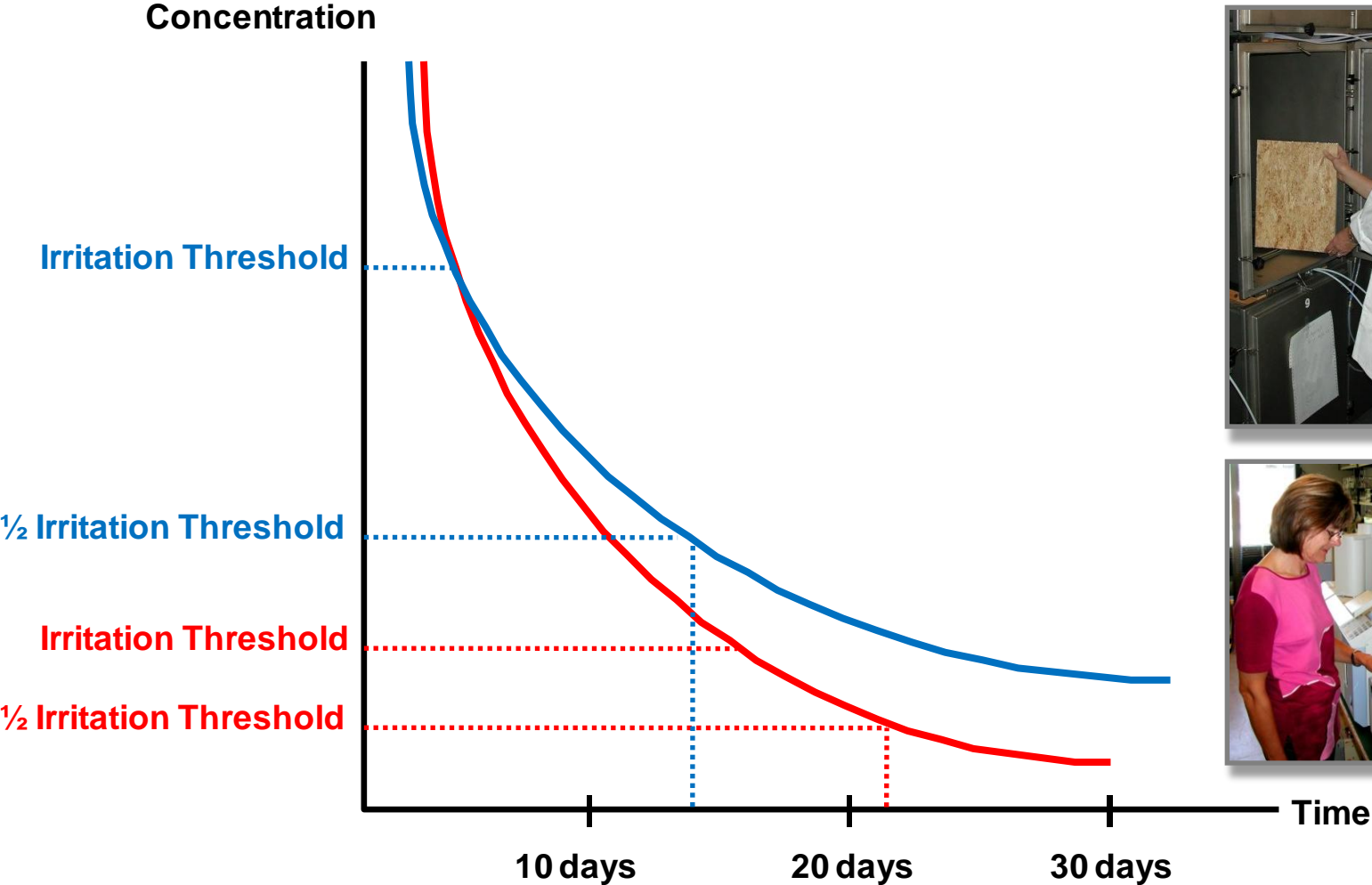


Features

- Standard Test Method based on ISO 16000-series
- "Open" structure which allow easy implementation of new product areas
- Determination of the indoor-relevant time-value
 - chemical analysis of emissions
 - VOCs and aldehydes (evaluated according to irritation threshold values)
 - sensory evaluation of emissions (odour)
- No CMR-substances emitted (IARC, cat. 1)

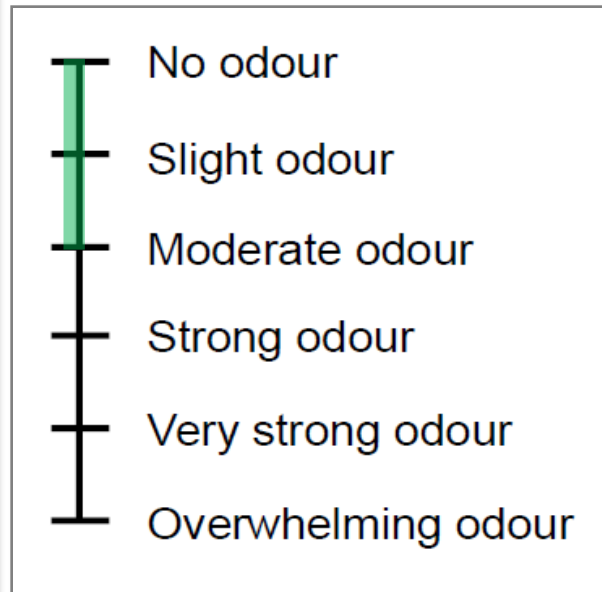
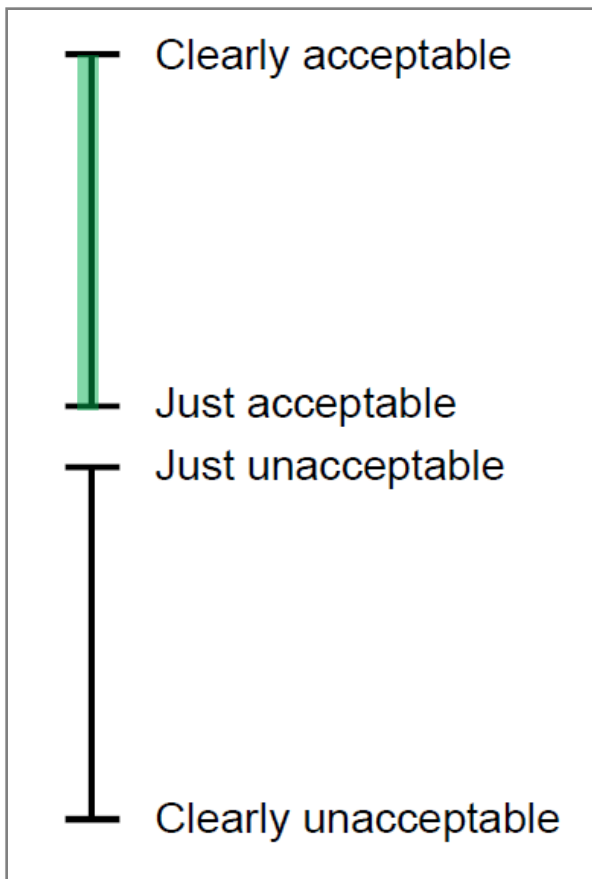


Indoor-relevant time-value



Sensory evaluation

- Untrained panel, minimum 20 persons



Additional requirements

- Directions for storage, handling, application, cleaning and maintenance must be available
- Ceiling products tested for the release of fibres and particles (NT Built 347 method)



Experiences from evaluation of material emissions (1)

BEFORE

Evaluation of single VOC's according to *Odour* threshold values

Poor correlation between calculated time-value vs. sensory evaluation

NOW

Evaluation of single VOC's according to *Irritation* threshold values

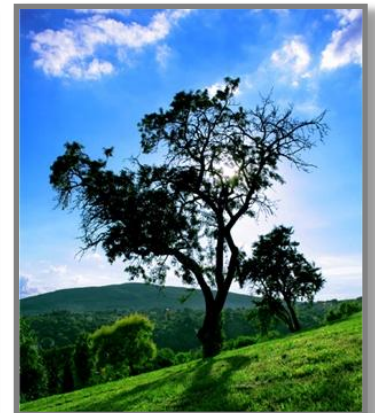
Chemical analysis:
Identification of unwanted substances,
sensory irritation

Sensory evaluation:
comfort (odour)



Experiences from evaluation of material emissions (2)

- Large variation in *number* of emitted substances: between 3 and 65
- Large variation in total *amount* of emitted substances
- Products with characteristic odours may not meet the criteria



Experiences (3)

- Originally: Intended for the Danish market
- Now:
 - Manufacturers from several European countries hold labelling licenses
 - The Indoor Climate Label is used world-wide
 - Some manufacturers test according to several national labelling schemes



There is a need for a harmonised scheme!



**THANK YOU
FOR
YOUR ATTENTION!**

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