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FOCAL RESEARCH FORMALDEHYDE

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The special department is working as testing, supervision and certification body both for building products according to the federal state building regulations and for building products in accordance with the building product guideline. The special department documents its testing competence by the accreditation according to DIN EN ISO/IEC 17025. Moreover the department is as well an approved third party certified body (TPC) by the californian air resources board as accredited by the Japanese Ministry for Land, Infrastructure and Transportation (MLIT) as laboratory for the measurement of formaldehyde in accordance with Japanese Industrial Standard (JIS).

- Determination of the formaldehyde emission according to DIN EN 717-1 of all kinds of wood-based materials and their products in large test chambers (up to 48 m³) and 1 m³ chambers
- Determination of the formaldehyde emission according to DIN EN 717-2 of coated wood-based materials and uncoated plywood as well furniture foils according to the gas analysis method
- Determination of the formaldehyde contents according to DIN EN 120 of uncoated particle and fibre boards according to the perforator method
- Determination of the formaldehyde content according to american chamber method ASTM D 1333 and ASTM D 6007-2 for uncoated wood based panels
- Determination of formaldehyde content according to desiccator method ASTM D 5582-00
- Determination of the formaldehyde emission according to JIS A 1901 for wood-based materials using the 1 m³ chamber method
- Determination of the formaldehyde emission according to JIS A 1460, JIS A 5905, JIS A 5908 for uncoated and coated particle and fibre boards using the desiccator method
- Determination of the formaldehyde emission according to JIS A 6921 for wallpapers using the desiccator method
- Determination of the formaldehyde emission according to JAS MAFF for plywood, OSB and solid wood products

Tests according to American Standards
- Determination of the formaldehyde content according to american chamber method ASTM D 1333 and ASTM D 6007-2 for uncoated wood based panels
- Determination of formaldehyde content according to desiccator method ASTM D 5582-00

Tests according to Japanese Standards
- Determination of the formaldehyde emission according to JIS A 1901 for wood-based materials using the 1 m³ chamber method
- Determination of the formaldehyde emission according to JIS A 1460, JIS A 5905, JIS A 5908 for uncoated and coated particle and fibre boards using the desiccator method
- Determination of the formaldehyde emission according to JIS A 6921 for wallpapers using the desiccator method
- Determination of the formaldehyde emission according to JAS MAFF for plywood, OSB and solid wood products

Formaldehyde is chemically the most simply structured aldehyde, representing one of the most important raw materials in the chemical industry due to its high reactivity.

The main application occurs in the production of synthetic resins, which are converted to aminoplastic but also to phenolic resins and are thus used to the substantial part as glue resins in the wood-based material production. These wood-based materials manufactured with formaldehyde condensation resins as bonding agents however can emit formaldehyde as a function of different factors.

In the Federal Republic of Germany in accordance with the Regulation on the Prohibition of Chemicals (ChemVerbotsV) only wood-based materials are required not exceeding a maximum concentration in a test chamber of 0,1 ppm of formaldehyde. Also the DIBt guideline valid for the construction range requires so-called “E1” wood-based materials. A number of further European states accept and/or require low formaldehyde emission wood-based materials, the “E1” products. Furthermore the interest in “CARB products” is more and more increasing. These are products which are certified according to the Californian law and the north american market.