



## EMISSIONS OF HARMFUL SUBSTANCES NOVATOP SWP

<b>Emissions</b> <sup>(3)</sup> :		A process in the chamber: E DIN EN 13419-1, an implementation provision in the certificate natureplus <sup>(4)</sup>	
<b>Volatile organic compounds (VOC)</b> <b>VOC classified in:</b> K1, K2, M1, M2, R1, R2 (according to TRGS (technical rules for dangerous substances) 905, Directives 67/548 EHS) IARC Group 1 and 2A, MAK (maximal concentration on the workplace) III1, III2  <b>Sum of volatile organic compounds (TVOC)</b> Out of that: Sum of alkylating aromates Sum of bicycle terpenes Sum of substances creating perception according to MAK IV, list of BgVV (Federal office for health protection of consumers and veterinary medicine) (6) Kat. A, TRGS 907 Sum VOC classified in: K3, M3, R3 (according to TRGS 905, Directive 67/548 EHS) IARC Group 2B, MAK III3 Sum of saturated n-aldehydes Special individual substances	$\mu\text{g}/\text{m}^3$  n.u. <sup>(5)</sup>  $\leq 300$ $\leq 50$ $\leq 200$ $\leq 100$  $\leq 50$  $\leq 180$ NLH	Preparation of the test: E DIN EN 13419-3 a Evaluation: DIN ISO 16000-6  24 hours from placing into the testing chamber  28 d from placing into the testing chamber 28 d from placing into the testing chamber 28 d from placing into the testing chamber 28 d from placing into the testing chamber  28 d from placing into the testing chamber  28 d from placing into the testing chamber 28 d from placing into the testing chamber	
	Sum of heavy volatile organic compounds (SVOC)	$\leq 100$	28 d from placing into the testing chamber
	<b>Monomeric isocyanates</b> <sup>(7)</sup>	n.b. <sup>(8)</sup>	28 d from placing into the testing chamber
	<b>Formaldehyde</b>	$\mu\text{g}/\text{m}^3$ $\leq 36$ <sup>(9)</sup>	Austrian standard ÖN or more precisely DINV ENV 717-1 28 d from placing into the testing chamber
	<b>Odor</b>	Score of odor $\leq 3$	Provision on performance in the certificate of natureplus, Six-level point scale 24 hours from placing into the testing chamber

n. u. cannot be specified

NLH limiting value according to natureplus (see list of limiting values VOC in natureplus)

<sup>(1)</sup> other parameters only in case of well-founded suspicion

<sup>(2)</sup> only in case of well-founded suspicion

<sup>(3)</sup> analyses of emissions are carried out on the combined test sample "combined from 4 test samples from various production batches"

<sup>(4)</sup> provision on performance in natureplus, "testing in the testing chamber"

<sup>(5)</sup> limit of determination for individual substances:  $1 \mu\text{g}/\text{m}^3$

<sup>(6)</sup> BgVV (Publisher: Detlev Kayser, Eva Schleder): „Chemicals and contact allergies – well-arranged schedule with evaluation“

<sup>(7)</sup> in case the polymer-based binding agents are used MDI (PMDI)

<sup>(8)</sup> limits of determination of isocyanates: TDI, HDI  $1 \mu\text{g}/\text{m}^3$ , MDI  $0,1 \mu\text{g}/\text{m}^3$

<sup>(9)</sup>  $36 \mu\text{g}/\text{m}^3 = 0,03 \text{ ppm}$



## LIMITS ON EMISSIONS OF HARMFUL SUBSTANCES NOVATOP SWP

On the basis of the Directive on submitting the job orders 0211 at certified products (multi-layer solid wood panels made of the full spruce wood) it is required that the below-mentioned limiting values of harmful substances emissions and contents of harmful substances are not exceeded.

Tested parameters	Limiting values	Testing method
Obsažené látky:		
<b>Organic compounds with content of halogens</b> AOX EOX	<b>mg/kg</b> ≤ 1 ≤ 1	Provisions on implementation in the certificate Natureplus
<b>Metals and non-metals <sup>(1)</sup></b> <b>B</b> <b>Cu</b> <b>Cr</b> <b>Hg</b>	<b>mg/kg</b> ≤ 25 ≤ 10 ≤ 5.0 ≤ 0.1	Decomposition to nitric acid /fluorhydric acid DIN 38406-E29 or more precisely EN ISO 1185 DIN 38406-E29 or more precisely EN ISO 1185 DIN 38406-E29 or more precisely EN ISO 1185 DIN 38406-E29 or more precisely EN 1483
<b>Pesticides <sup>(2)</sup></b> <b>Organic pesticides with content of chlorine:</b> Aldrin, chlordane, chlorthalonil, DDD, DDE, DDT, dichlorfluanid, dieldrin, endosulfan, endrin, alfa-HCH, beta-HCH, delta-HCH, heptachlor, hexachlorbenzol,  <b>Pyrethroids:</b> Cyfluthrin, Cyhalothrin, Cypermethrin, Deltamethrin, Fenvalerat, Permethrin.  <b>Other:</b> Imazalil, Isoxaben, Simazin  <b>Sum of pesticides:</b>	<b>mg/kg</b> ≤ 0.5*  ≤ 0.5*  ≤ 0.5*  ≤ 1	Analogically DFG S 19 * Limiting values for individual substance Limits of determination 0,1 mg/kg