

SICHERHEITSWERK · EXPOSURE-LIMIT CORRECTION

Workplace Exposure Limits GKV 2025 – Verified Edition

Verified master table for styrene, formaldehyde, ε-caprolactam and isopropanol against the Austrian Limit Values Ordinance 2025 (Federal Law Gazette II No. 339/2025, Annex I)

Thomas [Nachname] · Schichtwerk, Vienna
office@schicht-werk.eu · schicht-werk.eu · June 2026

Purpose of this sheet

This sheet confirms and corrects the exposure-limit master table of the Occupational Safety Handbook against the current Limit Values Ordinance 2025 (in force since 31 Dec 2025). Where values here differ from earlier editions, this verified edition applies.
The GKV 2025 changed NO value and NO classification for the four substances listed here; the amendment concerned asbestos, lead/diisocyanates and CLP coding. Not legal advice; the authoritative text is the RIS full text (law no. 20001418).

1. Verified Master Table (AT / DE)

Substance (CAS)	Austria GKV 2025 (TMW / STV)	Germany TRGS 900 (OEL / peak)	Classification
Styrene (100-42-5)	TWA 20 ppm / 85 mg/m³; STV 80 ppm / 340 mg/m³ (15 min, 4×)	OEL 20 ppm / 86 mg/m³; EF 2 (cat. II)	AT: MAK, no carcinogen, no H/S; DE: Repr. 2 (Y)
Formaldehyde (50-00-0)	TWA 0.3 ppm / 0.37 mg/m³; STV 0.6 ppm / 0.74 mg/m³ (ceiling)	OEL 0.3 ppm / 0.37 mg/m³; EF 2 (cat. I)	AT: III A2 (carc. w. threshold), Sh; DE: Carc. 1B, Muta. 2, Sh
ε-Caprolactam (105-60-2)	TWA 5 mg/m³ (I); STV 40 mg/m³ (I) (15 min, 4×)	OEL 5 mg/m³ (I); EF 2 (cat. I) → STV 10 mg/m³; note H	AT: MAK, no H; DE: H (since 06/2024), Y
Isopropanol (67-63-0)	TWA 200 ppm / 500 mg/m³; STV 800 ppm / 2000 mg/m³ (15 min, 4×)	OEL 200 ppm / 500 mg/m³; EF 2 (cat. II) → STV 400 ppm / 1000 mg/m³	MAK; Y

I = inhalable fraction; TWA = 8-h time-weighted average; STV = short-term value; EF = excursion factor; Sh = skin-sensitizing; H = dermally absorbable; Y = no risk of harm to the unborn child if observed. German and Austrian short-term values follow different systems and are not directly comparable.

2. Changes Against the Earlier Table

2.1 Styrene – corrected

- TWA in mg/m³: 86 → 85 mg/m³ (85 is the Austrian value; 86 mg/m³ is the German OEL).
- STV added: 80 ppm / 340 mg/m³ (15-min average, 4× per shift) – the earlier table lacked the short-term value.
- Labelling: styrene is NOT listed in Annex I as carcinogenic, dermally absorbable (H) or sensitizing (S); only the reproductive-toxicity note (DE cat. 2) is supported.

2.2 ε-Caprolactam – German comparison corrected

- Austrian value unchanged and correct: TWA 5 mg/m³ (I), STV 40 mg/m³ (I).
- German comparison: 10 → 5 mg/m³ (I). The values 10/40 mg/m³ are only the old EU indicative values (Dir. 2000/39/EC), not the current OEL.
- Germany has listed caprolactam as dermally absorbable (H) since June 2024; Austria (yet) does not – a relevant divergence for skin protection.

2.3 Formaldehyde and Isopropanol – confirmed

- Formaldehyde: TWA 0.3 ppm / 0.37 mg/m³, STV 0.6 ppm, III A2 – unchanged and correct (classification stable since Fed. Law Gazette II 288/2017).
- Isopropanol: STV 800 ppm confirmed (Austrian Annex I; not a ceiling). Contrast: German STV only 400 ppm (EF 2). The 800 ppm value is Austrian, not German.

3. What the GKV 2025 Actually Changed

The amendment Federal Law Gazette II No. 339/2025 (issued 30 Dec 2025) transposed EU directives: asbestos (Dir. 2023/2668; new limit 10,000 f/m³, from 21 Dec 2029 then 2,000 f/m³), lead and diisocyanates (Dir. 2024/869; NCO values 10/20 µg/m³ from 9 Apr 2026, from 1 Jan 2029 6/12 µg/m³) and carcinogens (Dir. 2004/37/EC). In addition, the coding of carcinogenic and reprotoxic substances was generally switched to CLP classification and germ-cell mutagens defined as a separate group (§ 10a). For styrene, formaldehyde, caprolactam and isopropanol this produced no changes.

Conflict of interest: The author operates Schichtwerk, a service company in additive manufacturing. This correction sheet was produced without external funding and serves the factual correction of exposure limits; not legal advice.

4. References

- [1] Limit Values Ordinance 2025 (GKV 2025), Federal Law Gazette II No. 339/2025, Annex I/2025. RIS – consolidated federal law, no. 20001418. Introductory decree GKV amendment 2025 (Central Labour Inspectorate).
- [2] Labour Inspectorate. Commented Limit Values Ordinance (GKV amendment 2025); limit-value overview. arbeitsinspektion.gv.at. AUVA. New laws and ordinances. auva.at.
- [3] TRGS 900 “Workplace exposure limits” (2024/2025). BAuA/DGUV. New OELs in TRGS 900 (June 2024) – inclusion of ε-caprolactam 5 mg/m³ (I) with note H; BAuA rationale ε-caprolactam (version 23 May 2024).
- [4] GisChem (BG RCI/BGHM) data sheet styrene (CAS 100-42-5); manufacturer safety data sheets with GKV reference for isopropanol and caprolactam (REACH Annex II).

Note: the RIS full text of Annex I/2025 should be spot-checked for binding use; as the amendment demonstrably did not touch these four substances, there is no reasonable doubt about the validity of the values.