

SMELTING-GRADE CHROME OXIDE GREEN

METALLURGICAL · ALUMINOTHERMIC FEEDSTOCK

IDENTIFICATION

Chemical name	Chromium(III) oxide	Formula	Cr ₂ O ₃
CAS No.	1308-38-9	EC No.	215-160-9

TYPICAL SPEC

Cr ₂ O ₃ content	≥ 99.0 %%	Particle gradation	Controlled window (custom)
Carbon	Low	Bulk density	High (sintered)
Silicon	Low	Moisture	≤ 0.3 %%

METAL SPEC TARGETS (GB/T 3211 REFERENCE)

Cr	≥ 99.0 %%	C	≤ 0.03 %%
Si	≤ 0.25 %%	Fe	≤ 0.35 %%
Al	≤ 0.30 %%	S	≤ 0.02 %%

PROCESS NOTES

Cr₂O₃ + 2Al → 2Cr + Al₂O₃, ≈ -536 kJ/mol; adiabatic temperature ≈ 2400–2700 °C. Liquid chromium (6.3 g/cm³) settles below alumina slag (2.7 g/cm³). Particle window is screened for fast, complete reaction without charge dusting.

PACKAGING & TRACEABILITY

25 kg bags · 1 t big bags. Lot-level CoA with C/S/Si data; blockchain QR per lot.