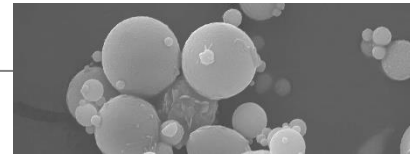


Product Data Sheet

Flugasche RL



Fly Ash for Concrete according to DIN EN 450

Flugasche RL fly ash is a fine-grained building material consisting mainly of dust-like, glassy particles from the generation of electricity and heat from hard coal, which was processed in the Lünen drying plant. The main constituents of fly ash are the amorphous phases of silicon, aluminium and iron oxide formed from the natural coal slurries.

Owing to its grain structure and pozzolanic reactivity, fly ash has a positive impact on both fresh concrete and hardened concrete: in green concrete, fly ash improves the workability of concrete; in hardened concrete it increases the compressive strength of the concrete and, by contributing to a denser microstructure of the concrete, also improves the durability of the concrete structure.

Flugasche RL fly ash in accordance with DIN EN 450 can be used as Type II addition in concrete subject to DIN 1045-2 / DIN EN 206-1 (national provisions may apply). Fly ash has been used successfully for decades in the concrete producing industry as a high-quality raw material; in designing the concrete composition, the fly ash content may be credited toward the cement content and, via the k-value, towards the water/cement ratio.

The material's high quality is ensured by regular internal quality inspection and monitored by a recognized and independent inspection body. In addition to the Certificate of Conformity issued by **MPA NRW**, the environmental compatibility of **Flugasche RL** has been verified in a general technical approval procedure.

In its declaration of performance the manufacturer of **Flugasche RL** has declared not only the criteria of DIN EN 450, but also compliance with the environmental requirements according to the MVV TB number A 3.2.3 and the environmental guideline by the German Committee for Reinforced Concrete (DAfStb).

Certificates

Certificate of Conformity:
0432-CPR-00102-03



Product Data

based on a statistic evaluation of the product autocontrol results for the year 2023¹⁾

Parameters	Average		Std. dev.	Requirement
Normativ				
Loss on ignition Category A	3,9	M.-%	0,42	≤ 5,0
Fineness > 0.045 mm Category N	24	M.-%	3,0	20 ± 10
CaO _{ges}	5,7	M.-%	0,55	≤ 10,0
CaO _{frei}	0,08	M.-%	0,11	- ²⁾
SO ₃	0,8	M.-%	0,05	≤ 3,0
Cl	0,01	M.-%	0,00	≤ 0,10
Na ₂ O _{äqui}	1,3	M.-%	0,07	≤ 5,0
Particle density	2,23	g/cm ³	0,03	2,25 ± 0,2
Activity-index	28d	78	%	≥ 75
	90d	89	%	≥ 85

- ¹⁾ The data compiled in the table shall not be deemed to be warranted characteristics nor constitute any warranty of quality.
- ²⁾ from a content greater than > 1.5 M.-% the soundness shall be tested

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