



M.I.O Micaceous Iron Oxide Euro-Mica™

With its fish-scale-like and plate-like structure, the qualities of the natural iron oxide (Fe_2O_3) Euro-Mica™ are comparable to those of muscovite mica. Scale armor paints and iron oxide paints were named after these micaceous iron oxide characteristics. Micaceous iron oxide paints are well approved in heavy corrosion protection and are preferential substances in building protection wherever long life durability is needed.

The micaceous iron oxide Euro-Mica™ has an excellent lamellar structure with a content of lamellar particles of about 70% (according to the current ISO norm). This lamellar structure creates that barrier effect which is responsible for the long-lasting corrosion protection. This blockade avoids actively the penetration of humidity (salt water, tropical moisture) and air pollution. This scale-like structure is also the reason for the excellent adhesion to the substrate of anti-corrosion coatings as well as in intermediate layers in multilayers coatings.

Moreover, the lamellar structure of Euro-Mica™ acts as an UV filter. Thus, Euro-Mica™ supports a sustainable delay of degradation of the binding resin resulting from climatical influences.

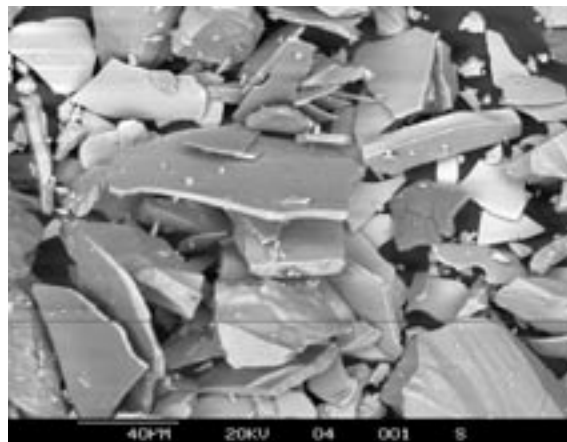
Characteristic of the chemical analysis of Euro-Mica™ is the high purity. Euro-Mica™ is characterised by a high Fe_2O_3 content. Of comparable importance is the absence of quartz contamination. The decisive parameter for the immediate corrosion protection is the electrolyte content of pigments in the coating system. Euro-Mica™ provides an extraordinarily low electrolyte content. The micaceous iron oxide Euro-Mica™ offers a characteristic steel-grey colour with metal shine. Euro-Mica™ behaves neutrally in corrosion protection systems using coloured pigments.

Four main qualities of Euro-Mica™ are available, differing in particle size distribution. The product specifications comply with the valid micaceous iron oxide standards as per ISO 10601 and the TL/TP-KOR-Steel constructions (Standards issued by German Railways and BAST Road Construction Authorities).

Technical Data of Euro-Mica™ / Technische Daten von Euro-Mica™

	Euro-Mica SF	Euro-Mica AS	Euro-Mica SG	Euro-Mica DB	
Chem. Analyse / -is					
Fe₂O₃	> 90 %	> 90 %	> 90 %	> 90 %	
SiO₂	max. 1,50 %	max. 1,50 %	max. 1,50 %	1-1,8 %	
Al₂O₃	max. 0,60 %	max. 0,60 %	max. 0,60 %	0,3-0,6 %	
CaO	0,50%	0,50%	0,50%	0,1-0,4 %	
MgO	0,10%	0,10%	0,10%	0,01-0,02 %	
MnO	0,20%	0,20%	0,20%	0,1-0,2 %	
Korngrößen / Part. Sizes	ISO 3549	ISO 3549	ISO 3549	ISO 3549	
> 105 µm		Spuren / traces	Spuren / traces	Spuren / traces	
> 74 µm	Spuren / traces				
> 63 µm		max. 5 %	5-15 %	25-35 %	
> 44 µm	max. 15 %				
> 32 µm	max. 30 %				
Phys. Daten / Phys. Data					
Spez. Gewicht/ Spec. Gravity	4,8 g/cm ³	4,8 g/cm ³	4,8 g/cm ³	4,8 g/cm ³	
Schüttgewicht/ Bulk density	2,1-2,4 g/cm ³	1,8-2,1 g/cm ³	2,0-2,3 g/cm ³	1,7-2,0 g/cm ³	
pH-Wert / -value	7,0-7,6	7,5-9,5	7,5-9,5	7,5-9,5	(ISO 787)
Ölzahl/ Oil absorption	20 ± 2 g/100g	18 ± 2 g/100g	17 ± 2 g/100g	17 ± 2 g/100g	(ISO 787)

REM-Aufnahmen von / Microscopic photographs of Euro-Mica



Vergrößerung / Enlargement 500 x