FINNTALC M15E

Functional Extender

GENERAL INFORMATION

FINNTALC M15E is a hydrated magnesium silicate with chemical formula of $Mg_3Si_4O_{10}(OH)_2$.

Finntalc grades are purified in a cascade of multiple flotation cells. This process results in a tight definition of the talc composition, making this natural product similar to a synthetic chemical. In combination with a precisely controlled particle size distribution, this ensures exact reproducibility in formulations.

APPLICATIONS

 Paints & Coatings: general purpose, spray applied industrial coating with dry film thickness of 30 - 45 μm.

KEY PROPERTIES

• Pure, lamellar, medium particle size talc with sharp top-cut, stable colour, very hydrophobic, inert and soft.

INCORPORATION

FINNTALC M15E can be used as a functional extender to achieve following results:

Good barrier properties, good anti-corrosion properties, good outdoor durability, good sandability, good application properties with no sagging.

LEVELS OF USE

Typical use levels for paints and coatings applications are 5 - 20 % depending upon the application and the desired properties.

HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

STORAGE RECOMMENDATIONS

Store dry.

SHELF LIFE

FINNTALC M15E has a shelf life of 5 (five) years from the date of manufacture.

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 certificate, which guarantees that all operations are conducted according to the stipulated standards.

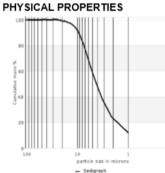


FINNTALC M15E

MINERALOGY

CHEMICAL PROPERTIES	RTIES
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OPTICAL PROPERTI	'IE S
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CAS-No. 14807-96-6 EINECS-No. 238-877-9 MgO XRF 31 % SiO2 XRF 60 % CaO XRF 0.1 % Al2O3 XRF 0.5 % Fe2O3 XRF 2.2 % Fe acid soluble 1mol/L HCl, 100°C 0.2 % Loss on ignition DIN 51081/1000°C 6 % PH value ISO 787/9 9.1 Whiteness Ry DIN 53163 84 % ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 1.5 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 5 <th>Talc (Mg-Silicate) Traces of magnesite, dolo</th> <th>mite and chlorite</th> <th>97</th> <th>%</th>	Talc (Mg-Silicate) Traces of magnesite, dolo	mite and chlorite	97	%
SiO2 XRF 60 % CaO XRF 0.1 % Al2O3 XRF 0.5 % Fe2O3 XRF 2.2 % Fe acid soluble 1mol/L HCI, 100°C 0.2 % Loss on ignition DIN 51081/1000°C 6 % pH value ISO 787/9 9.1 % Whiteness Ry DIN 53163 84 % ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 µm Median particle size D50 Sedigraph, ISO 13317 15 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Specific surface area BET , ISO 4652 6 m²/g Oil absorption ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 1 7apped density ISO 787/11 0.5 g/cm³				
CaO XRF 0.1 % Al2O3 XRF 0.5 % Fe2O3 XRF 2.2 % Fe acid soluble 1mol/L HCl, 100°C 0.2 % Loss on ignition DIN 51081/1000°C 6 % pH value ISO 787/9 9.1 Whiteness Ry DIN 53163 84 % ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 µm Median particle size D50 Sedigraph, ISO 13317 15 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 1 Tapped density ISO 787/11 0.5 g/cm³ Bulk density DIN 5346	MgO	XRF	31	%
Al2O3 XRF 0.5 % Fe 2O3 XRF 2.2 % Fe acid soluble 1mol/L HCl, 100°C 0.2 % Loss on ignition DIN 51081/1000°C 6 % pH value ISO 787/9 9.1 Whiteness Ry DIN 53163 84 % ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 4.5 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 mg Hardness Mohs 1 g/cm³ Bulk density DIN 53468 0.3 g/cm³	SiO2	XRF	60	%
Fe2O3 XRF 2.2 % Fe acid soluble 1mol/L HCI, 100°C 0.2 % Loss on ignition DIN 51081/1000°C 6 % pH value ISO 787/9 9.1 Whiteness Ry DIN 53163 84 % ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 4.5 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 5 Hardness Mohs 1 5 Bulk density DIN 53468 0.3 g/cm³	CaO	XRF	0.1	%
Fe acid soluble1mol/L HCl, 100°C0.2%Loss on ignitionDIN 51081/1000°C6%pH valueISO 787/99.1Whiteness RyDIN 5316384%ISO brightness R457ISO 247083%Refractive indexMallard1.57CIE L*, a*, b*DIN 617493.0/-0.3/1.2Yellowness indexDIN 61671.35Top cut D98Sedigraph, ISO 133174.5Median particle size D50Sedigraph, ISO 133174.5Fineness of grindISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs17apped densityISO 787/110.5Bulk densityDIN 534680.3g/cm³	AI2O3	XRF	0.5	%
Loss on ignition pH valueDIN 51081/1000°C6%pH valueISO 787/99.1Whiteness RyDIN 5316384%ISO brightness R457ISO 247083%Refractive indexMallard1.57CIE L*, a*, b*DIN 617493.0/-0.3/1.2Yellowness indexDIN 61671.35Top cut D98Sedigraph, ISO 133174.5µmMedian particle size D50Sedigraph, ISO 133174.5µmFineness of grindISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs15g/cm³Bulk densityDIN 534680.3g/cm³	Fe2O3	XRF	2.2	%
pH valueISO 787/99.1Whiteness RyDIN 5316384%ISO brightness R457ISO 247083%Refractive indexMallard1.57CIE L*, a*, b*DIN 617493.0/-0.3/1.2Yellowness indexDIN 61671.35Top cut D98Sedigraph, ISO 1331715Median particle size D50Sedigraph, ISO 133174.5Fineness of grindISO 152440WmSpecific surface areaBET , ISO 46526MerzyMohs1Tapped densityISO 787/110.5Bulk densityDIN 534680.3	Fe acid soluble	1mol/L HCl, 100°C	0.2	%
Whiteness RyDIN 5316384%ISO brightness R457ISO 247083%Refractive indexMallard1.57CIE L*, a*, b*DIN 617493.0/-0.3/1.2Yellowness indexDIN 61671.35Top cut D98Sedigraph, ISO 1331715Median particle size D50Sedigraph, ISO 133174.5Fineness of grindISO 152440Specific surface areaBET , ISO 46526MarasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5Bulk densityDIN 534680.3	Loss on ignition	DIN 51081/1000°C	6	%
ISO brightness R457 ISO 2470 83 % Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 15 Median particle size D50 Sedigraph, ISO 13317 4.5 Fineness of grind ISO 7524 40 Specific surface area BET , ISO 4652 6 m²/g Oil absorption ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 7 Bulk density DIN 53468 0.3 g/cm³	pH value	ISO 787/9	9.1	
Refractive index Mallard 1.57 CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 15 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 1524 40 µm Specific surface area BET , ISO 4652 6 m²/g Oil absorption ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 1 Bulk density DIN 53468 0.3 g/cm³	Whiteness Ry	DIN 53163	84	%
CIE L*, a*, b* DIN 6174 93.0/-0.3/1.2 Yellowness index DIN 6167 1.35 Top cut D98 Sedigraph, ISO 13317 15 µm Median particle size D50 Sedigraph, ISO 13317 4.5 µm Fineness of grind ISO 1524 40 µm Specific surface area BET , ISO 4652 6 m²/g Oil absorption ISO 787/5 37 g/100g Abrasion Einlehner AT 1000 5 mg Hardness Mohs 1 7 Bulk density DIN 53468 0.3 g/cm³	ISO brightness R457	ISO 2470	83	%
Yellowness indexDIN 61671.35Top cut D98Sedigraph, ISO 1331715Median particle size D50Sedigraph, ISO 133174.5Fineness of grindISO 152440Specific surface areaBET , ISO 46526Oil absorptionISO 787/537AbrasionEinlehner AT 10005HardnessMohs1Tapped densityISO 787/110.5Bulk densityDIN 534680.3	Refractive index	Mallard	1.57	
Top cut D98Sedigraph, ISO 1331715µmMedian particle size D50Sedigraph, ISO 133174.5µmFineness of grindISO 152440µmSpecific surface areaBET , ISO 46526m²/gOil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³	CIE L*, a*, b*	DIN 6174	93.0/-0.3/1.2	
Median particle size D50Sedigraph, ISO 133174.5µmFineness of grindISO 152440µmSpecific surface areaBET , ISO 46526m²/gOil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs17apped densityISO 787/11Bulk densityDIN 534680.3g/cm³	Yellowness index	DIN 6167	1.35	
Fineness of grindISO 152440µmSpecific surface areaBET, ISO 46526m²/gOil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs11Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³	Top cut D98	Sedigraph, ISO 13317	15	μm
Specific surface areaBET, ISO 46526m²/gOil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³	Median particle size D50	Sedigraph, ISO 13317	4.5	μm
Oil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³	Fineness of grind	ISO 1524	40	μm
Oil absorptionISO 787/537g/100gAbrasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³	Specific surface area	BET . ISO 4652	6	m²/a
AbrasionEinlehner AT 10005mgHardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³			-	-
HardnessMohs1Tapped densityISO 787/110.5g/cm³Bulk densityDIN 534680.3g/cm³		Einlehner AT 1000	5	0 0
Bulk density DIN 53468 0.3 g/cm ³	Hardness	Mohs	1	
,	Tapped density	ISO 787/11	0.5	g/cm ³
Moisture ISO 787/2 0.1 %		DIN 53468	0.3	-
	Moisture	ISO 787/2	0.1	- %

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