

Mica

FEATURES AND BENEFITS

The Mica range of products are obtained as a co-product from the pegmatite ore at our mining operation situated in the Limpopo Province in South Africa. After separation the Mica is delaminated, screened, milled and classified to specific size specifications.

Mica offers high aspect ratio flakes providing pearlescence and two-dimensional reinforcement, glistening aesthetic properties, inertness and acid resistance, heat stability, dielectric strength, imparts hardness and scrub resistance to coatings and bonded substrates and provides ease of dispersion in oils and water-based formulations.

The main uses of Mica include:

- ❖ As an inert functional filler in paints, varnishes, coatings, sealants and mastics.
- ❖ In mica sheeting, paper and board for electrical insulation.
- ❖ In cosmetics and personal care products.
- ❖ In aesthetic applications – sprayed onto surfaces for a pearlescent effect.
- ❖ In cement-based tile adhesives and mastics for co-reinforcing properties.
- ❖ As a fluidiser in fire extinguisher powder applications.
- ❖ As a functional filler and extender in high-performance industrial coatings.
- ❖ Promoting spreadability in gypsum, cement plasters, adhesives and grouts.
- ❖ For dielectric properties, heat & acid resistance in thermosetting polymers.
- ❖ As a partial replacement to glass and acrylic fibre.
- ❖ In acrylics, butadiene, vinyl-acrylics and urethanes.

DATASHEET REVISION

Revision Number	07
Revision Date	07/05/2019

CHEMICAL ANALYSIS

Mean values. These do not represent a specification.

SiO ₂	45.7 %
Al ₂ O ₃	34.3 %
Fe ₂ O ₃	4.2 %
K ₂ O	10.3 %
Na ₂ O	0.7 %
MgO	0.4 %
Others	<0.1 %
LOI	<4.3 %

PARTICLE SIZE ANALYSIS AND PROPERTIES

Mean values. These do not represent a specification.

		40#	60#	325#
Trade Names		Mica 40	Mica 60	Mica 325
% Retained @ 45 µm		N/A	N/A	<2%
% Retained @ 250 µm	% weight	>25%	<5%	N/A
% Retained @ 425 µm	% weight	<20%	<1%	N/A
% Retained @ 710 µm	% weight	<10%	0%	N/A
Reflectance (Opacity Reflectometer)	%	N/A	N/A	83
Bulk Density (As Packed)	kg/litre	0.37	0.32	0.43
Specific Gravity	kg/litre	2.70	2.70	2.70
Hardness	mohs	2.5	2.5	2.5
Melting Point	°C	>1250	>1250	>1250
Packaging: 25kg packed bags		Yes	Yes	Yes

** Quality controlled by means of wet sieve analysis

Notice: While information contained herein is correct to the best of our knowledge, Micronized Products hereby disclaims any warranties as to the accuracy of the information. Recommendations or suggestions are made without guarantee or representation as to result, since conditions of usage are beyond our control. All materials are sold subject to Micronized Products' standard terms and conditions of sale including the condition that the buyer shall conduct his own tests to determine the suitability of each product for the buyer's purpose. No statement contained herein shall be construed as a recommendation to infringe any patent.

FELDSPAR • SILICA • TALC • MICA • BARYTES • VERMICULITE • KAOLIN

Directors:
BS Booth, RH Weissenberg, KK Watson

Micronized SA Ltd, Reg. No 2007/005688/06

JOHANNESBURG (HEAD OFFICE)
P.O. Box 91575
Auckland Park, 2006, South Africa
Tel: +27 11 486-1919
Fax: +27 11 486-1928
E-mail: info@micronized.com

LIMPOPO – UNION MINE & WORKS
Private Bag X3010
Phalaborwa, 1390, South Africa
Tel: +27 15 817-1828
Mica, Limpopo
GPS: 24°09'23.4"S, 30°49'41.4"E

JOHANNESBURG FACTORY
69 Barney Road
Benrose, 2094, South Africa
Tel: +27 11 624-0909
Benrose, Johannesburg
GPS: 26°12'38.3"S, 28°05'03.3"E

GRAHAMSTOWN FACTORY
1 Victoria Street (off Cobden Street)
Grahamstown, 6140, South Africa
Tel: 011 486-1919 (head office)
Grahamstown, Eastern Cape
GPS: 33°18'29.1"S, 26°32'08.8"E