

ARKEMA

RILSAN®
FINE POWDERS

Bio-based Polyamide
Fine Powders
Durable by Nature



DURABLE BY NATURE

Advanced materials designed to sustainably meet the challenges of an evolving world

ADVANCED BIO-CIRCULAR MATERIALS

THE CIRCLE OF LIFE MEETS THE CIRCULAR ECONOMY



ARKEMA

MAIN BENEFITS OF RILSAN® FINE POWDERS INCLUDE

- Outstanding flexibility
- Excellent impact resistance
- Resistance to a wide variety of chemicals
- Wide service temperature range
- Low density
- Low moisture pick up (high dimensional stability)
- Unrivalled wear resistance
- Proprietary micronisation process producing a wide diversity of particle size distribution and formulations.

ADVANCED MATERIALS

Arkema is a pioneer in amino 11 chemistry. Our flagship Rilsan® polyamide 11 has a proven legacy in meeting some of the world's most demanding material challenges. It's trademark properties include light weight, flexibility, durability, energy return, and overall toughness.

BIO-BASED

Arkema's amino 11 chemistry is derived from the castor bean, a sustainable, renewable crop that does not compete with food and does not cause deforestation. Arkema is a leading driver of sustainable castor farming in India.

CIRCULAR

The castor bean is actually a seed. When planted, more seeds grow – the circle of life.

Further, Rilsan® and Pebax® Rnew® grades are generally recyclable. Arkema offers its Virtucycle® services to partner customers.

Rilsan® Fine Powders are constantly evolving and developing to meet your needs. Our proprietary micronisation process can produce a wide range of uniform particle sizes, offering a powder matched to your processing and performance requirements.

METAL COATING

There is a Rilsan® Fine Powder for every standard powder coating method in use today. A variety of colours is available, produced by either the dry blend or the mass coloration process. The mass color process provides a uniform finish color and superior UV stability.

Whatever the coating method used, careful surface preparation and proper primer application are necessary to achieve optimum performance.

RILSAN® FINE POWDERS T and FB

T and FB grades have an average particle size around 100 µm. They are designed for the fluidized bed dip coating process. A desirable coating thickness between 250 and 500 µm can be achieved.

RILSAN® FINE POWDERS ES and ESY

These polyamide powders have an average particle size around 30 µm and are designed for the electrostatic spraying process. A desirable coating thickness between 80 and 150 µm can be achieved.

RILSAN® FINE POWDERS MC

MC grades have an average particle size around 50 µm. They are specially designed for coating small items using the minicoat/maxicoat process, originally developed by Arkema to allow very high productivity.

RECOMMENDED PRIMERS

High performance primers are marketed under the Primgreen® (water-borne, low VOC) and Rilprim® (solvent-based) brands. These primers have been specially developed for compatibility with Rilsan® Fine Powders. Across a range of processing temperatures, these primers provide Rilsan® PA11 coatings optimum anticorrosion protection on a variety of metal substrates.

OTHERS

RILSAN® FINE POWDERS D

These polyamide powders are used as additives in paint formulations. Rilsan® D powders provide excellent scratch and abrasion resistance and a desired structural effect in a wide range of liquid paints, both water-borne and solvent-borne.

RILSAN® INVENT

These powders are specially designed for laser sintering processes, offering unique mechanical properties for high performance applications. The product range includes mass coloured black powder for excellent colour finish.

THE CASTOR BEAN

TRULY SUSTAINABLE!



No competition with food / feed



No deforestation



Highly profitable for the farmers (the main reason they grow castor)



Grown mainly in India only in the poorest soil



**The beans are crushed to make ~45% oil and 55% cake
(sold as fertilizer)**

ARKEMA'S GLOBAL COMMERCIAL AND TECHNICAL SERVICE

Rilsan® Fine Powders are backed by a global and integrated organization for supply chain, marketing, technical support and development.

This global team will assist you at every stage in your use of Rilsan® Fine Powders, from design and industrial development through market launch and supply. Our technical centres in France, China, Japan and the US provide you with first class technical assistance wherever you are. Call on our technical support teams for high-tech solutions that ensure the economic success of your project.

PACKAGING

Rilsan® Fine Powders are supplied in 20 or 25 kg sealed bags or octabins. The bags consist of a multilayer Kraft paper/PE, which ensures mechanical resistance, efficient palletization, and an excellent moisture barrier. Every Rilsan® Fine Powders bag carries appropriate labels with all essential data for traceability.

SUCCESSFUL RESULTS IN A WIDE VARIETY OF APPLICATIONS

METAL COATING

Combining beauty and function, Rilsan® coatings offer a solution for the most demanding applications. The Rilsan® brand has become the reference for industries around the world looking for the ultimate solution in metal protection.



AUTOMOTIVE AND TRANSPORTATION

SPLINE SHAFTS, SLIDING DOOR AND SEAT RAILS, SPRINGS, BRACKETS, CLIPS AND SAFETY BELT FASTENERS

- Exceptional abrasion resistance
- Noise and vibration dampening
- Stone chipping resistance at low temperatures



FLUID TRANSFER

PIPES AND FITTINGS, VALVES, FLANGES, COUPLINGS, FLOW METERS, INJECTION AND PRODUCTION TUBING

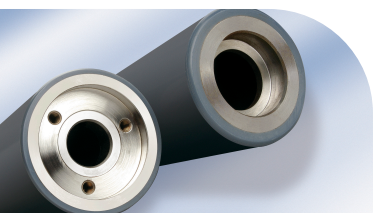
- Anti-corrosion properties
- Compliance with the most demanding specifications for drinking water contact
- High resistance to hydrocarbons and water treatment chemicals



ELECTRICAL INSULATION

BUSBARS AND ELECTRIC INSULATION

- Excellent insulation even at low thickness
- Easy to process, good adhesion on copper and aluminum
- UL Certified



TEXTILE / PRINTING / FOOD / HEALTHCARE

UNDERGARMENT WIRES AND ADJUSTORS, PRINTING AND TEXTILE ROLLERS, PHARMACEUTICAL AND FOOD PROCESSING EQUIPMENT, HOSPITAL BEDS, WHEELCHAIRS, AND AMBULANCE STRETCHERS, ETC.

- Unique warm-to-the-touch, smooth surface finish with low friction
- Easy to clean, high resistance to chemicals, inks, detergents and heat
- Suitable for dyeing • Machinable • Limits bacterial growth



WIRE ARTICLES

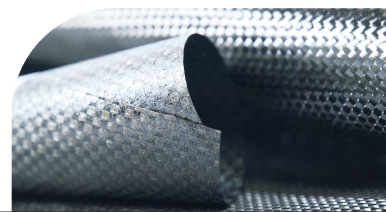
DISHWASHER BASKETS, SHOPPING CARTS, SHELVING, VARIOUS CLEANING TROLLEYS

- Very easy processing
- Excellent resistance to alkaline and chlorinated hot water
- Bendable
- Combines the best of thermoplastic impact resistance and thermoset hardness

OTHER APPLICATIONS

COMPOSITES

Toughening agent and thermoplastic resin for optimal composite fibre impregnation resulting in outstanding mechanical properties



ADDITIVE MANUFACTURING

Specific grades of powder designed for laser sintering to produce 3D parts with exceptional mechanical properties



COATINGS ADDITIVES

Surface enhancement and texturing for industrial coatings (please consult Orgasol®/Rilsan® - additives for high performance coatings brochure)



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**For technical data visit our
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