

ORGASOL® Ultra-Fine Powders

Coating Benefits



Orgasol® : An asset in Coating Formulations

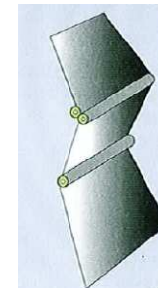
- Combination of:



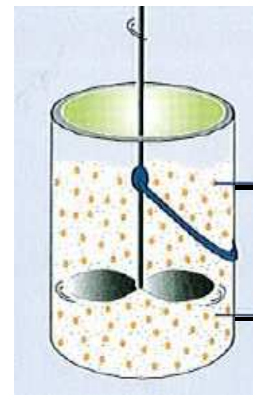
Orgasol®: Process ability in Coatings



- **Orgasol® is an additive incorporated in all kind of formulations:**
 - **All kind of formulations:**
 - Polyurethane, Epoxy, Polyester, Acrylic, Phenolic
 - Solvent based, Water based, UV curable
 - **With all kinds of coating processes**
 - Roller, Brush, Spray...



- **Easy to disperse**
- **Low impact on viscosity**



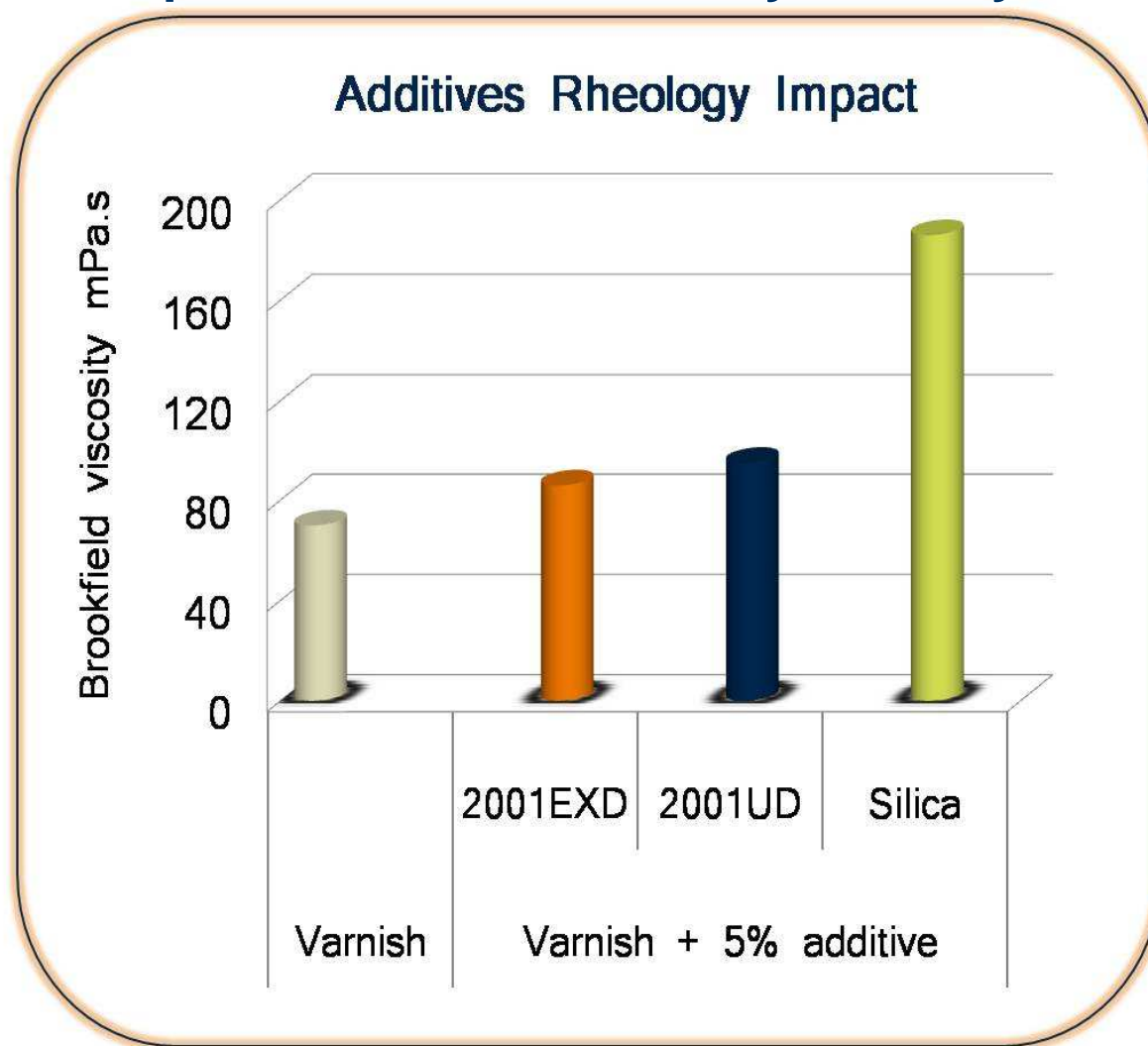
Orgasol®

Paint

Orgasol®: Process ability in Coatings



- Low impact on varnish viscosity contrary to silica

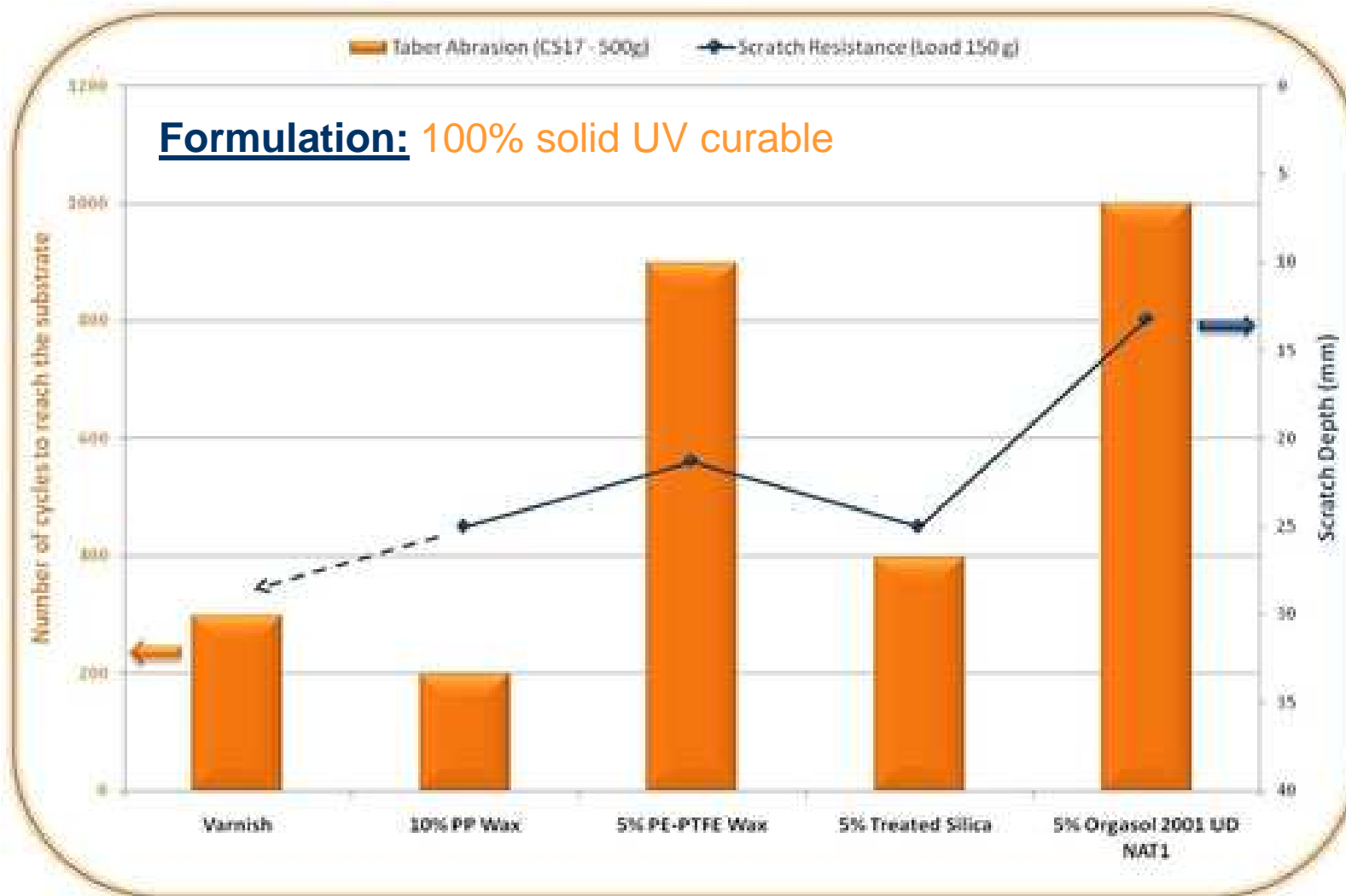


Formulation:
100% solid UV
curable

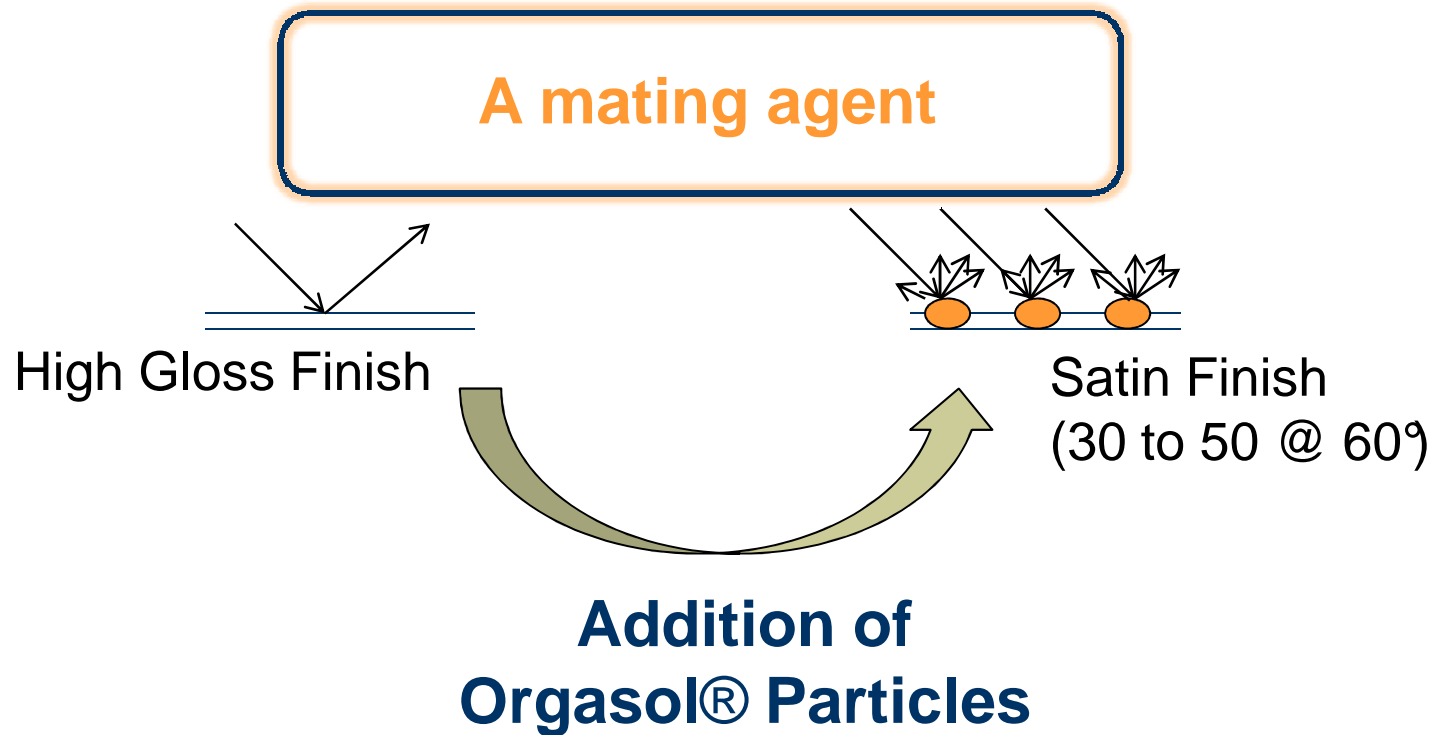
Abrasion/Scratch Resistance



- A better combination of abrasion-scratch resistance



Orgasol®: Mating Effect

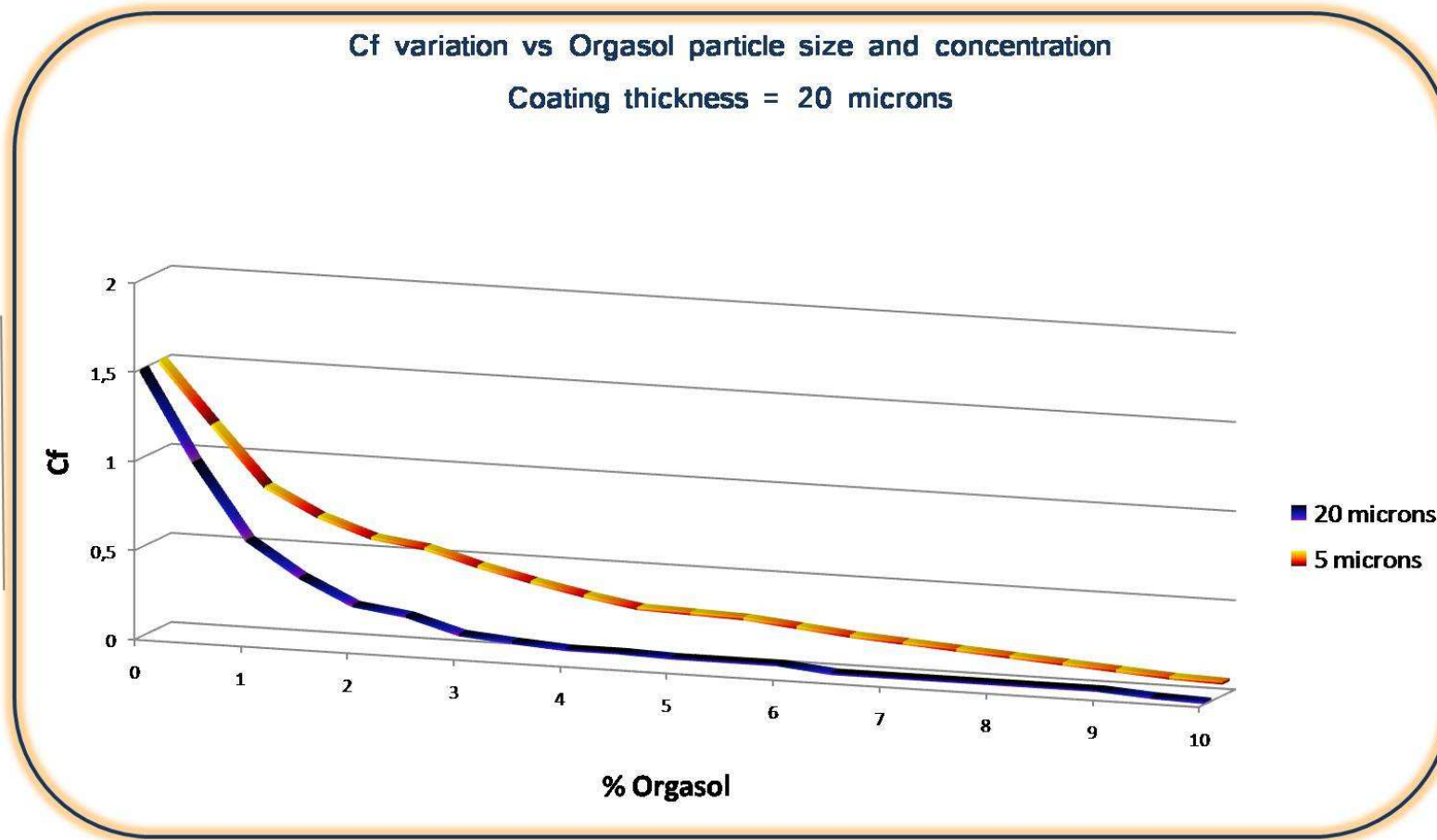


- **Orgasol® enables to limit an increase in viscosity level**
- **Optimum gloss reduction for coating thickness 10 to 25 µm:**
 - **Because Orgasol® has a limited tendency to migrate at the surface**
⇒ 2001 EXD NAT1, 2001 UD NAT1

Lubricant Effect



- Drop of the friction coefficient (Cf) with low Orgasol® addition (<1-2%):



Formulation: 2K Polyurethane Water based

Texturing Effect



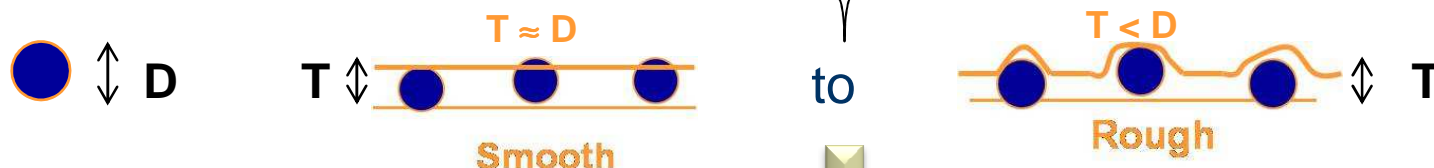
Large offer of powder
average particle size

From 5 to 60 microns

Ratio particle size/
coating thickness

% of Orgasol®
incorporation

1 to 10%



A unique texturing agent

Regular Surface






















Very Narrow Size
Distribution

A Spherical Shape

A unique patented polymerization process

Orgasol® VS Indirect Competition

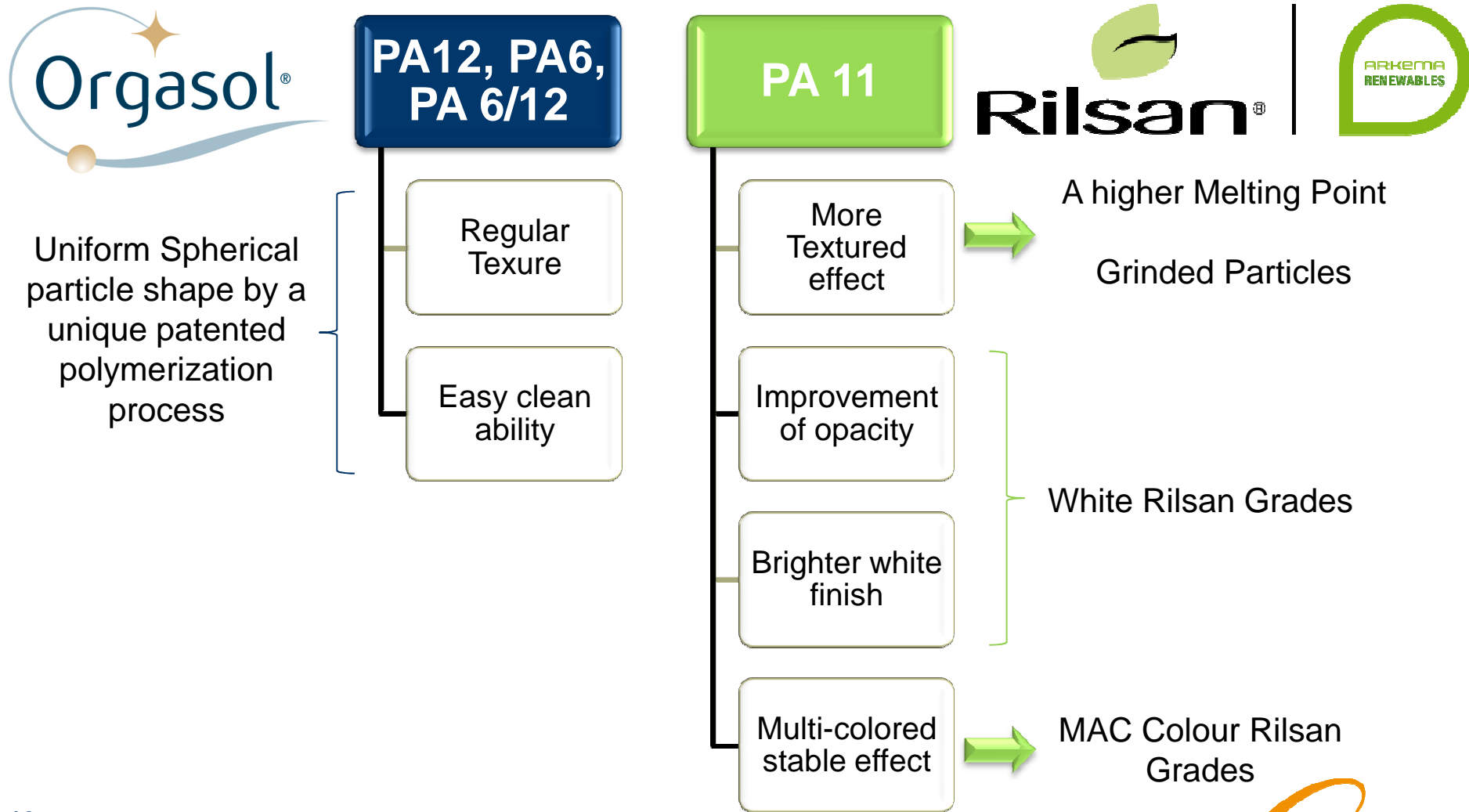


	Additives Powders				
		Polyethylene/ Polypropylene	PMMA	Silica	PTFE - PE
Abrasion Resistance					
Scratch Resistance					
Gloss Reduction					
Texturing Effect					
Other Properties	Good Slip Control/ Improve Cleanability		Poor Solvent resistance in some cases	Increase in viscosity	Poor stability/ Recoatability issue

Arkema Polyamide Products



Similar Abrasion & Scratch Resistance

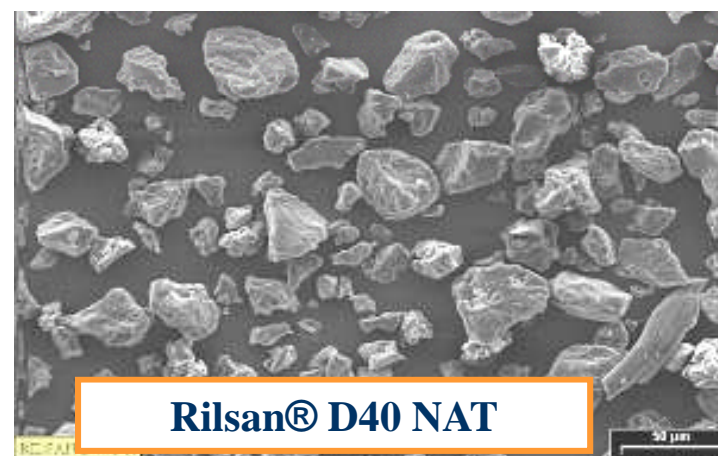


Orgasol® VS Rilsan®



- **Manufacturing process is different :**

➡ **Direct Polymerization VS Grinding step**



Rilsan® D General Characteristics



- **A Polyamide 11 range
(high molecular weight thermoplastic polymer)**
- **Unique process from a renewable raw material of plant origin**
- **Adjustable particle size from 20 to 50 μm (+ D80)**
- **Dispersed in liquid paints as additives**

Rilsan® D Range



RILSAN D	Specified D50 (µm)	Melting Point (°C)	Apparent density (g/cm3)
Rilsan D20 White	20 - 24	186	0,45
Rilsan D30 NAT	21 - 27		0,34
Rilsan D40 NAT	27 - 31		0,37
Rilsan D40 White	26 - 33		0,5
Rilsan D50 NAT	40 - 46		0,37
Rilsan D60 NAT	43 - 55		0,37
Rilsan ES MAC	28 - 36		0,4 - 0,6

- **Low density (avoiding settlement phenomenon)**
- **Mass-colored grades for multicolored effect and opacity**

ORGASOL® ANNEX



Applications and Recommended Grades



	Main Applications										
	Coil Coating	Can Coating	Rubber Coating	Flooring	Wood Coating	Plastic Coating	Inks	OPVs	Inkjet Papers	Metal Powder	Composites
2001UD NAT1				+	+	+		+			
2001UD NAT2		+					+	+			
2001EXD NAT1			+	+	+	+					
2002EXD NAT1		+					+	+			
2002D NAT1	+		+	+	+	+					
2002ES3 NAT3	+			+	+	+					
2002ES4 NAT3	+			+							
2002ES5 NAT3	+			+							
2002ES6 NAT3	+			+	+	+					
1002D NAT1			+								+
3202D NAT1				+							
3501EXD NAT1									+	+	
3202D NAT1			+						+	+	

Orgasol®: Nomenclature



PA nature (**2** for PA12, **1** for PA6, **3** for PA6-12)

Particle size (**UD** for 5 µm, **EXD** for 10 µm, **D** for 20 µm,
ES3 - 6 for 30 - 60 µm)

2002 EXD NAT

Melt Viscosity indication
1 < 2

Color (**NAT** stands for natural)

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RCS Nanterre – Version 1.0 - 03 2009