



COMPAL D – COMPAL K – SPLENDAL – for Blitz Bonded Powder Coatings - EXPANDAL

BENDA-LUTZ® COMPAL D ALUMINIUM PELLET

Compal 4xxx D is a form of delivery for metal pigments (pellets), which offers the processor several benefits in handling and safety. Basically all pigments can be supplied as pellets. Blitz® Compal D has been developed especially for the printing ink industry.



Benefits of Compal D-Pigments

- * - free of volatile organic compounds
- * - free of dust
- * - safe and cleaning handling
- * - non hazardous goods
- * - easy to disperse
- * - broad compatibility
- * - non leafing

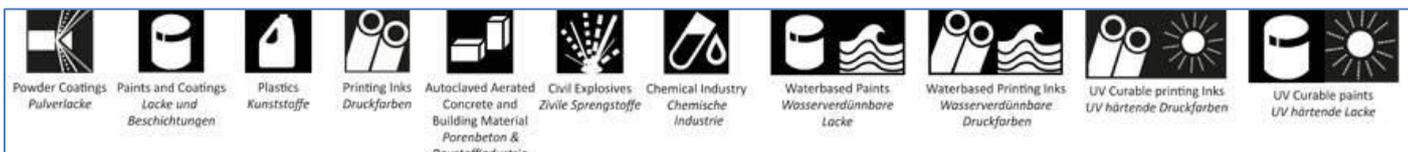
Incorporation of Compal



BENDA-LUTZ® COMPAL D Aluminium Pellet, dust free			
BENDA-LUTZ® COMPAL D Aluminium Pellet, staubfrei		Cornflake	Silver dollar
BENDA-LUTZ®		4242 D	4456 D 4466 D
Metal Content			
<i>Metallanteil</i>	%	80	87,5 87,5
Carrier		Aldehyde resins	
<i>Trägermaterial</i>		<i>Aldehyd-Harz</i>	
Residue on Sieve 325mesh			
<i>Rückstand auf Sieb 45µm</i>	max. %	0,12	0,1 0,1
Average Particle Size			
<i>Durchschnittliche Teilchengröße</i>		13	16 13
Fields of application			 
<i>Anwendungsgebiete</i>			

Fields of application: screen, gravure and flexo solventborne printing inks

Carrier Aldehyde resins – grade Compal D: 4242D, **4251D**, 4456D, 4466D, **41062D** – standard packaging carton 20 kg



BENDA-LUTZ® COMPAL K ALUMINIUM PELLET

COMPAL K is a form of delivery metal pigments (pellets), which for workers plastics processing offer several benefits in handling and safety.

COMPAL K contains from 70 to 80% of aluminum flakes, ensure flexibility in the formulations. The result is a bright metallic chrome effect.

COMPAL K has been specially developed for applications in the plastics industry (plastics, masterbatches).

Benefits of Compal K-Pigments

- * - free of volatile organic compounds
- * - free of dust
- * - safe and cleaning handling
- * - non hazardous goods
- * - easy to disperse
- * - broad compatibility with standard thermoplastics
- * - FDA approved for food contact
- * - significant improvement in the storage stability against over aluminum paste

BENDA-LUTZ® COMPAL K Aluminium Pellets, dust free					
<i>BENDA-LUTZ® COMPAL K Aluminium Pellets, staubfrei</i>					
BENDA-LUTZ®		4409 K	4412 K	4414 K	4281 K
Metal Content <i>Metallanteil</i>	%	70	70	70	70
Carrier <i>Trägermaterial</i>		Polyethylene Wax <i>Polyethylenwachs</i>			
Bulk Density <i>Schüttdichte</i>	g/cm ₃	0,7	0,7	0,7	0,7
Average Particle Size <i>Durchschnittliche Teilchengröße</i>	µm	75	60	40	9
Fields of application <i>Anwendungsgebiete</i>					

BENDA-LUTZ®		4811 K	4812 K	4232 K	4270 K	4278 K
Metal Content <i>Metallanteil</i>	%	80	80	80	80	80
Carrier <i>Trägermaterial</i>		Polyethylene Wax <i>Polyethylenwachs</i>				
Average Particle Size <i>Durchschnittliche Teilchengröße</i>	µm	60	52	20	9	9
Fields of application <i>Anwendungsgebiete</i>						

Broad compatibility with: PE , PP , PS , ABS , SAN , PA , PC standard packaging - carton 25 kg

Rubber	PVC	LDPE	PP	HDPE	Styrenics	Nylon 6	PC	PET
176 °C	137 °C	137 °C	215 °C	215 °C	215 °C	260 °C	260 °C	260 °C
A	-	A	A	A	A	B	B	B

A: Suitable

B: Possible heat stability problems

- : No recommended



amount of fine particles	ilosc drobnych czastek
opacity	krycie
brightness	jasnosc
brilliance	odblask
flop	opadanie
particle size distribution	rozklad wielkosci czastek

Particle shape and particle size have a huge influence on the properties of the pigments in various applications. So-called **Cornflake pigments** contain a lot of fine particles, have a broad particle size distribution and an irregular pigment shape. This results in giving the application excellent hiding powder.

However, the coating appears somehow greyish and shows poorer image clarity.

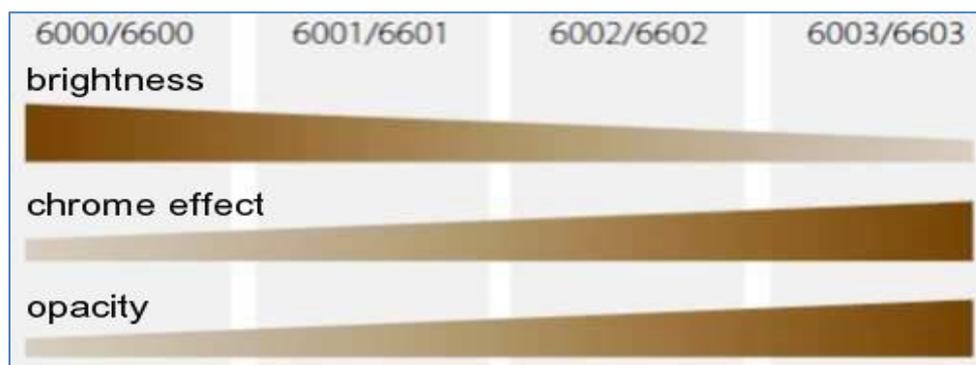
Mixed with coloured pigments the colour shades appear unclean.

Silver dollar pigments on the other hand are characterized by a very regular particle shape and a narrow particle size distribution. As they contain few tiny particles no greying occurs and when mixed with transparent coloured pigments very pure colours are possible.

The smooth surface results in a better-looking reflection and thus in higher brightness and brilliance.

Benda-Lutz® SPLENDAL: Vacuum Metallized Aluminium Suspensions

Microscopically thin non-leafing aluminium platelet suspensions produced via physical vapor deposition (PVD). This unique manufacturing technology provides perfectly smooth and uniform flakes for extraordinary brilliance and coverage.



Preferred applications

- Wheel rim paints
- Reflectors
- Automotive accessories
- Automotive OEM
- Kitchen and furniture handles
- Sport and recreational equipment
- Exclusive household devices
- Precious stones



vacuum metallized pigments - microscope



Splendal coating can be applied on perfectly smooth white or black base. Then waterborne lacquer protects and covers the polyurethane varnish or other suitable to the intended use.



Lacquer coating Splendal may be clear or colored dyes. The topcoat can be from high gloss to matte deep.

BENDA-LUTZ® SPLENDAL high brilliance aluminium suspension non-leafling
BENDA-LUTZ® SPLENDAL hochbrillante Aluminiumsuspension non-leafling

BENDA-LUTZ®	6000	6001	6002	6003	6001 L
Metal Content <i>Metallanteil</i>	%	10	10	10	10
Solvent <i>Lösungsmittel</i>	Ethyl Acetate / Isopropyl Acetate ¹⁾ <i>Ethylacetat / Isopropylacetat</i>				
Fields of application <i>Anwendungsgebiete</i>					

Also available with following solvents (identification by suffix):

Lieferbar auch mit folgenden Lösungsmitteln (Kennzeichnung durch Zusatzbuchstaben):

- ¹⁾ **BG = Butyl Glycol / Butylglykol**
MP = Methoxy Propanol / Methoxypropanol
MOPAC = Methoxy Propyl Acetate / Methoxypropylacetat

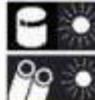
Benda-Lutz® SPLENDAL for Waterborne passivated

BENDA-LUTZ®	6600	6601	6602	6603
Metal Content <i>Metallanteil</i>	%	10	10	10
Solvent <i>Lösungsmittel</i>	Butyl Glycol ²⁾ <i>Butylglykol</i>			
Fields of application <i>Anwendungsgebiete</i>				

Also available with following solvents (identification by suffix):

Lieferbar auch mit folgenden Lösungsmitteln (Kennzeichnung durch Zusatzbuchstaben):

- ²⁾ **IP = Isopropanol / Isopropanol**

BENDA-LUTZ®	6002 UV	6003 UV
Metal Content <i>Metallanteil</i>	%	10
Solvent <i>Lösungsmittel</i>	DPGDA <i>Dipropylene glycol diacrylate</i>	MOPAC <i>Methoxy Propyl Acetate</i>
Fields of application <i>Anwendungsgebiete</i>		

Grades: **6002 UV** and **6003 UV** are designed specifically for UV coatings and inks.

All Splendal standard packaging – pail 10 kg



Blitz® Bonding



The Benda-Lutz bonding process is known world-wide as the best and most reliable method for the production of high quality and perfectly processable metallic powder coatings.

This process, which is continually being further developed, guarantees users problem-free processability even with extremely challenging color tones and designs.

This is naturally, only possible due to our close and open collaboration with all of the well known manufacturers which put their trust in Benda-Lutz.

The bonding process can be explained by means of a simple illustration. The fine metal pigments are bonded with coarser powder coating particles (see picture).

Aeroxide Alu C – for Blitz® Bonded Powder Coatings - standard packaging - paper bag 10 kg

Additives for Building Material Industry

Blitz® Expandal > the strong mix

Composition

Mixture of coated aluminium powder, stabilizers and limestone powder
Anti-cracking agent, forms pores in floor pavements, mortars and limestone/cement plasters

Effect

Thanks to a chemical reaction triggered by the addition of water during preparation of the mortar, hydrogen gas evolves to compensate for shrinkage when the mass dries.

Application

The recommended application quantity Expandal lies between 0,02-0,1% covered to the total initial weight.



Advantages

* - prevents formation of cracks -*- easier to mix and handle than pure aluminium powder -*- not dangerous material as defined by ADR, IATA-DRG, IMDG and storage regulations

		Dispersible in water Wasserdispergierbar			Not dispersible in water Nicht wasserdispergierbar		Special types Spezialtypen	
Blitz®		9-6327	9-6355	9-6380	9-7342	9-7350	9-2041	9-G100/5
Metal content <i>Metallanteil</i>	%	9 – 10	9 – 10	9 – 10	9 – 10	9 – 10	9 – 10	4,5 – 5,0
Volatile contents <i>Flüchtige Bestandteile</i>	max. %	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Residue on sieve 200µm <i>Rückstand auf Sieb 200µm</i>	max. %	5,00	5,00	5,00	5,00	5,00	5,00	5,00
Other grades available on request <i>Weitere Typen auf Anfrage verfügbar</i>								

Standard packaging – bigbag 1000 kg, surcharge drum 180 kg, bag 40 kg and bag 25 kg