



# 1

## GENERAL INFORMATION

Swarovski offers a comprehensive range of services, tailored to customers' requirements, for the application of Swarovski products.

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## APPLICATION MANUAL

This Application Manual offers extensive information on the various Application Services provided by Swarovski. Thanks to their outstanding quality, and with the help of specially

developed application techniques, Swarovski products can be processed easily and quickly to produce a high-quality finished product. The processes involved are described

in this manual on a step-by-step basis, with photos and illustrations. Each application method contains detailed information on the following areas:

Product Overview	Swarovski products that are suitable for the application technique in question
Machines and Tools	List of machines and tools necessary for application
Suppliers	Selection of suppliers that sell these machines and tools
Application	Detailed description of the entire application process and the product-specific procedure Furthermore, the Hotfix Selector outlines extensive application parameters for suitable product and carrier material combinations
Useful Information	Advice and tips on working with Swarovski products
Quick Assistance	A checklist of typical application problems, along with possible causes and recommendations on avoiding them

Extensive care instructions and further information on laws, regulations, norms, and standards are featured at the end of the manual.

## APPLICATION ONLINE: WWW.SWAROVSKI-PROFESSIONAL.COM

All the information contained in this manual is regularly updated on the Swarovski business website [WWW.SWAROVSKI-PROFESSIONAL.COM](http://WWW.SWAROVSKI-PROFESSIONAL.COM).

In addition, application techniques are demonstrated through animations and videos. The site is an excellent way to find out about Swarovski's application services and application techniques.

# APPLICATION SERVICES

Swarovski offers a comprehensive range of services, tailored to your requirements, for applying Swarovski products. In doing so, the company aims to meet the needs of each industry, and to jointly offer flexible and integrated solutions.

- Technical enquiry service
- Compliance service
- Technical customer support – field services
- Application Partner Network

## TECHNICAL ENQUIRY SERVICE

Available worldwide, the technical enquiry service can help you in the following areas:

- Product information
- Technical drawing
- Care instructions
- Information on industry standards
- Individual application tests based on customer samples
- Information on machines and tools

**SWAROVSKI**

*application* SUPPORT

Customer: SWAROVSKI  
 Request Number: 100000200X  
 Date: 13. July 2016  
 Total Pages: 9

Dear Sir or Madam,

Enclosed please find our advice with regard to your application request.



**FIELD OF INTEREST**

- Request: Application on a metallic surface
- Base material: Mirror glass
- Segment: Interior
- Product group: Crystalex / Crystalex-t

**CONCLUSION AND ADVICE**

Regarding the request from SWAROVSKI we would give following advice. Generally the **application on metallic surfaces is possible**. Please be aware that Hettli is not developed for that kind of application and a valid bonding result cannot be guaranteed. Alternatively (i.e. adhesive or Hettli with external adhesive system), reaches very good bonding results. It depends always on the specifications and needs of the manufacturer. As our Crystalex-t (self-adhesive) could reach very good bonding result in combination with proper pre-treatment, it is suggested to test this version as well.

Please carry out tests for your own needs and specifications before running production!

Description / description		Product no.	Size	Material	© by Swarovski AG
Base material	Mirror Glass	1088	SS26	Crystalex	<small>                     The Swarovski logo is a registered trademark of Swarovski AG. All other trademarks are the property of their respective owners.                 </small>
ISO 216/A4	T0	18.06.2012		6.1	

## COMPLIANCE SERVICE

The worldwide available compliance service can support you in the following areas:

- Certificates
- Information on laws and regulations
- Compliance information of Swarovski crystals
- Compliance statement to customer-specific requirements

**OEKO-TEX®**  
CONFIDENCE IN TEXTILES

## CERTIFICATE

**The company**  
 D. Swarovski KG  
 Swarovskistrasse 30  
 6112 Wattens, AUSTRIA

is granted authorization according to STANDARD 100 by OEKO-TEX® to use the OEKO-TEX® mark, based on our test report **19081 120426.1 u. 19081 120426.2**

**for the following articles**

**Swarovski Crystals**

The results of the inspection made according to STANDARD 100 by OEKO-TEX®, product class II have shown that the above mentioned goods meet the human-ecological requirements of the standard primarily established for products with direct contact to skin.

The certified articles fulfil the requirements of Annex XIV of REACH (and, the case of eco-dyes, REACH, etc.) as well as the American requirement regarding lead content of lead in children's articles (CPSA), with the exception of accessories made from glass.

The holder of the certificate, who has issued a conformity declaration according to ISO 17065-1, is under an obligation to use the OEKO-TEX® mark only in conjunction with products that conform with the sample analysed herein. The conformity is verified by audits.

**The certificate 38047 is valid until 28.02.2018**

Wattens, 01.03.2017

*[Signature]*  
 OEKO-TEX® Management GmbH, c/o, Austria, Wattens

For further information, please contact your local Swarovski office.

## TECHNICAL CUSTOMER SUPPORT – FIELD SERVICES

Swarovski imparts its crystal application expertise through customized **Crystal Application Workshops, Crystal Application Consultancy, Troubleshooting, and Technical Assessments.** These can take place either on customers' premises or at Swarovski

locations. The focus is always on customers' individual needs, the efficient use of Swarovski products, and on the quality of the crystal application.

Our services have been created to take advantage of our comprehensive crystal

application expertise in the following areas: mastery of the relevant techniques, technical knowledge of Swarovski products, process-engineering competencies, and our experience of crystal application equipment, together with our product manufacturing knowledge of various industries.



### SERVICE RESULTS (dependent on the particular individual service package):

#### Prevention of increased development costs through technical input in:

- The correct choice of Swarovski products
- The correct technical design
- The correct application technique
- The correct integration of an application process into the entire process landscape
- Application process set-up

#### Prevention of cost complaints through technical input in:

- The correct positioning and arrangement of Swarovski products
- Learning how to check the quality of crystal applications
- Suitability of the customer's equipment and tools

#### Prevention of increased staff development costs through:

- Staff training in appropriate application techniques
- Building your technical knowledge base, thereby enabling you to be self-sufficient

## APPLICATION PARTNER NETWORK

As a company with a global sales network and deep understanding of the market, Swarovski has comprehensive knowledge of various application companies and their services from around the world.

Based on this knowledge, Swarovski has developed a global Application Partner Network. These partners offer a wide range of technical and product-related services, as well as tailored production solutions.

In order to qualify and to get access to the Application Partner Network, certain criteria

with regard to application techniques, know-how as well as product assortment need to be fulfilled by the application partners.

Application partners can assist you with a variety of application techniques, such as gluing, Hotfix application, sewing, laser cutting of Synthetics, and mechanical application. In addition, many partners can carry out technically complex solutions, such as Flat Back Leather, jewelry manufacturing,

and the automated, mechanical application of products such as Rivets. The services offered by our partners range from product and design consultancy, to prototyping and carrying out production, and make up a key component of our customer focus.

If you are interested in becoming a partner or you need to find a partner, the "Application Partner Platform" on [WWW.SWAROVSKI-PROFESSIONAL.COM](http://WWW.SWAROVSKI-PROFESSIONAL.COM) or your local Swarovski office offer guidance.

# SWAROVSKI PRODUCTS AND SUITABLE APPLICATION TECHNIQUES

		Soldering	Stone Setting	Plating	Gluing	Ceralun	Hotfix Application	Sewing	Embroidery	Hand Application	Mechanical Application
<b>Round Stones</b>			✓		✓	✓					
<b>Fancy Stones &amp; Settings</b>	Fancy Stones		✓		✓	✓					
	Settings <sup>1</sup>	✓	✓	✓	✓			✓ <sup>2</sup>		✓	
<b>Beads</b>								✓ <sup>2</sup>		✓	
<b>BeCharmed &amp; Pavé</b>	BeCharmed Beads & Pavé Balls							✓ <sup>2</sup>		✓	
	BeCharmed Rondelles, Charms & Pavé Pendants							✓ <sup>2</sup>		✓	
<b>Crystal Pearls</b>					✓	✓		✓ <sup>2</sup>		✓	
<b>Pendants</b>					✓			✓ <sup>2</sup>		✓	
<b>Flat Backs No Hotfix</b>			✓		✓	✓					
<b>Flat Backs Hotfix</b>	XILION Rose & XIRIUS Rose						✓				
	Framed Flat Backs						✓				
	Creation Stones						✓				
	Creation Stones Plus						✓				
	Cabochons & Framed Cabochons						✓				
<b>Sew-on Articles</b>	Sew-on Stones							✓		✓	
	Lochrose							✓	✓	✓	
<b>Self-adhesive Elements</b>					✓						
<b>Transfers</b>	XILION Transfers & XIRIUS Transfers						✓				
	Creation Transfers						✓				
	Creation Transfers Plus						✓				
	Mezzo Transfers						✓				
	Cabochon Transfers						✓				
	Crystal Diamond Transfers						✓				
	Framed Flat Back Transfers & Framed Cabochon Transfers						✓				

1 Settings with hole: suitable for soldering, plating, sewing, hand application; Settings without hole: suitable for soldering and plating.

Closed Setting with ring on top (C-version): suitable for gluing.

2 These products should be sewn by hand.

		Soldering	Stone Setting	Plating	Gluing	Ceralun	Hoflix Application	Sewing	Embroidery	Hand Application	Mechanical Application
<b>Synthetics</b>	Crystal Fabric				✓		✓				
	Crystal Rocks, Crystal Fine Rocks & Crystal Ultrafine Rocks				✓		✓				
	Graphic Fabric, Graphic Rocks, Graphic Fine Rocks, Graphic Ultrafine Rocks				✓		✓				
	Crystal Galuchat				✓		✓				
	Crystal Medley				✓		✓				
	Crystaltex				✓		✓	✓ <sup>1</sup>			
<b>Plastic Trimmings</b>	Basic Bandings				✓			✓	✓ <sup>2</sup>		
	Mini Rondelles									✓	
<b>Buttons &amp; Fasteners</b>	Crystal Buttons							✓		✓	
	Buttons with Plastic Shank							✓		✓	
	Snap Fasteners & Decorative Buttons										✓
	XIRIUS Flat Back Snap Fasteners										✓
	Jeans Buttons										✓
	Buttons with Metal Shank							✓		✓	
<b>Metal Trimmings</b>	Chaton & Flat Back Bandings / Motifs				✓			✓			
	Spike Bandings				✓			✓ <sup>3</sup>			
	Rivets, Square Rivets, Star Rivet, Spike Rivets, Rivet Flat Shaft										✓
	Rose & Chaton Montées							✓ <sup>3</sup>		✓	
	Rose Pins & Rhombus Pins										✓
	Crystal Studs										✓
	3D Studs										✓
<b>Crystal Mesh</b>					✓		✓	✓ <sup>4</sup>			
<b>Cupchains &amp; Findings</b>		✓		✓				✓		✓	

1 Not suitable for Crystaltex Chaton Bandings

2 Art. 50 002, 50 003, and 50 004 (single-row)

3 These products should be sewn by hand.

4 Crystal Fine Mesh has a very tight structure and should therefore be sewn by hand.



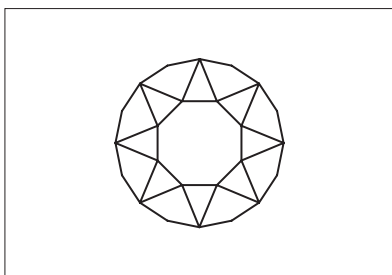
## GENERAL PRODUCT INFORMATION

This list offers an overview of Swarovski products that are suitable for the application methods described. Product categories/descriptions are based on the 2016 Collection.

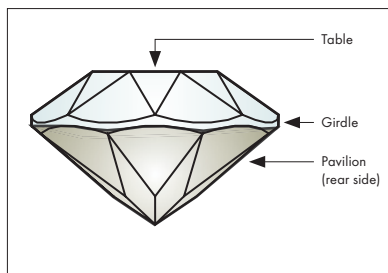
<b>Round Stones</b>	Round Stones are loose crystal elements. Most of them are pointed on the reverse side, making them easy to apply in either metal claw settings or pre-set cavities. The assortment features a wide variety of different cuts, the most innovative one being the XIRIUS Chaton and the smallest one being the XERO Chaton in size PPO.
<b>Fancy Stones &amp; Settings</b>	Fancy Stones are offered in numerous shapes ranging from classical gemstone-inspired cuts to progressive trend cuts. They come in a huge assortment of different sizes and colors. Showing either a faceted or flat reverse side, Fancy Stones can be glued into pre-cast cavities or used in metal settings. Their precision-cut facets ensure the highest brilliance and endow design ideas with a unique sparkle.
<b>Beads</b>	Beads offer the highest standard available on the market. The high-quality precision cutting and the clear through-hole achieve high brilliance and clarity. Rounded hole edges reduce the wear on thread and increase the durability of designs. The assortment is divided into classic, romantic, and progressive shape characteristics. They are available in the latest fashion colors, effects, and cuts.
<b>BeCharmed &amp; Pavé</b>	The BeCharmed assortment, from Beads, Crystal Pearls, Pavé, and Rondelles, to Stoppers and Pavé Balls in a brilliant array of colors and effects, offers unlimited combination possibilities. All products of this unique line feature a high-quality stainless steel part with Swarovski branding and a 4.5 mm-diameter hole, which is the standard size for existing charm concepts, making BeCharmed pieces ideal collectibles.
<b>Crystal Pearls</b>	Crystal Pearls are perfect replicas of genuine pearls. They are made of a unique crystal core covered with an innovative pearl coating, which features a flawless, silky smooth, rounded surface. They are available in a variety of shapes, sizes, and colors and are delivered loosely threaded or, if desired, also knotted.
<b>Pendants</b>	Pendants have timeless elegance and are available in a large range of classical and avant-garde cuts and shapes, as well as in many colors and effects. Pendants offer a whole range of design possibilities for different segments thanks to their easy application, with the hole on top requiring only a jump ring/pinch bail with a chain or cord.
<b>Flat Backs No Hotfix</b>	Flat Backs No Hotfix are loose crystal elements backed with platinum foiling for extra brilliance and protection. These Flat Backs are easy to apply to a variety of carrier materials using standard one- or two-component glues. They are available in a multitude of sizes, colors, shapes, and cuts.
<b>Flat Backs Hotfix</b>	Flat Backs Hotfix are loose crystal elements with a flat reverse side that has been pre-coated with a heat-sensitive glue. These Flat Backs can be easily applied to a large range of textile carrier materials using heat to produce a durable and long-lasting crystal effect. Flat Backs Hotfix are available in a multitude of colors, shapes, and cuts.
<b>Sew-on Articles</b>	Sew-on Articles are loose crystals that can be easily sewn (either by hand, or with a standard domestic or industrial embroidery sewing machine) onto any type of textile or accessory. Sew-on Articles come in two- or three-hole varieties, including round, oval, and triangle holes for use in a wide range of decorative applications for fine embroidery or even jewelry. Lochrosen are crystals with just one hole. Sew-on Articles have rounded edges on the hole entry and exit areas to guarantee thread protection.
<b>Self-adhesive Elements</b>	Self-adhesive Elements such as Crystal-it Infinity, Crystal Fabric-it, Crystal-tex-it or Crystal Fine Rocks-it are eye-catching and innovative products that come ready-to-apply. They are pressure-sensitive and self-adhesive. When applied to paper and solid surfaces, they can create elegant, romantic, or sporty designs.

<b>Transfers</b>	Transfers are ideal for Hotfix application on all kinds of textiles. They are available in a large range of motifs and numbers of rows, which are made up of different articles from the Flat Back Hotfix assortment. Featuring designs from our in-house design team, they can include XIRIUS and XILION Roses, or Creation Stones, as well as Cabochons.
<b>Synthetics</b>	These versatile products open up a multitude of creative design possibilities through their numerous application techniques. They combine elegant crystals from Swarovski that can be applied using Hotfix technology with synthetic carrier materials. They are ideal for use in the textile, interior design, jewelry, and accessories segments.
<b>Plastic Trimmings</b>	Plastic Trimmings are plastic carrier materials with integrated crystals. These multi-functional products can either be hand- or machine-sewn, or glued onto various surfaces. The range of bandings not only offers a color selection of chatons, but also a variety of casing colors.
<b>Buttons &amp; Fasteners</b>	Crystal Buttons can be used in exactly the same way as standard buttons. The assortment of button usage ranges from shirts, blouses, jackets, and coats, through to denim and accessories. They are suitable for hand and mechanical application.
<b>Metal Trimmings</b>	Metal Trimmings are forward-integrated metal products. They can be sewn by hand or machine and mechanically applied onto different fabrics or other materials. Metal Trimmings are bestsellers among the textile, shoe, and accessories segments because their wide range of application possibilities ensures that they can be used in a multitude of different ways.
<b>Crystal Mesh</b>	Crystal Mesh is a flexible metal mesh carrier with integrated loose crystals. The product is available in a wide range of colors and casings, either as a Hotfix version, which can be applied using heat, or as a No Hotfix version that can be hand- or machine-sewn.
<b>Cupchains &amp; Findings</b>	These products are metal chains and findings that can incorporate either Round or Fancy Stones into any creative design. They can be divided into seven sub-categories: Single Stone Settings, Cupchains and Brass Components, Multi Stone Settings, Channels, Metal Buttons, Rondelles, and Linked Findings. Each of these categories is available in a wide variety of shapes, sizes, colors, and platings.

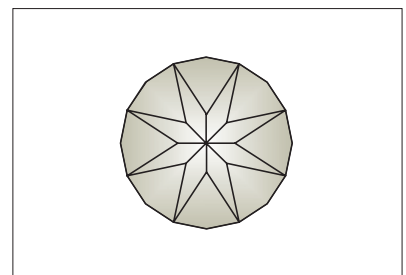
## CRYSTAL SPECIFICATIONS



Front view



Side view



Rear view (Pavilion)

## FOILING

Foiling is the process of mirror coating the reverse side of the crystals.



### Silver Foiling (A)

A silver mirror finish for XIRIUS and XILION Hotfix articles only.



### Platinum\* Pro Foiling (F)

A silver mirror finish that is coated with a platinum colored protective layer of highest quality. The Platinum Pro Foiling is not only resistant to environmental damage from chlorine, salt water, and perfume - it can also withstand processes such as soldering and electroplating, giving it unprecedented durability (e.g. art. 4120).



### Aluminum Foiling (M)

An aluminum mirror finish is applied using a vacuum coating process (e.g. art. 2855 Flat Back HF).



### Protective Layer (P) for Beads and Pendants

Protective layer is a transparent lacquer system that is applied over the effects. This lacquer is designed to protect the effects from scratches, fingerprints, and other damage and also helps to prevent moisture that can lead to corrosion (e.g. from perspiration) penetrating into the effect layer when jewelry is designed to incorporate Crystal Stones that are not set in casings/settings.



### Unfoiled (U)

## EFFECTS

### Vacuum Coating Effects

Vacuum coating processes on the surface of the crystal produce either a special surface or a translucent effect, according to the application methods used.

Please find below a list of all Swarovski effects followed by an explanation of the special vacuum coating processes.

### Surface Effects

(Vacuum coating on the surface of the crystal)



Effect Code	Name
AB	Aurore Boreale
ANTP	Antique Pink
API	Astral Pink
BLSH	Blue Shade
BRSH	Bronze Shade
CAL	Comet Argent Light
COP	Copper
DOR	Dorado
GSHA	Golden Shadow
HEM	Hematite (only on Jet)
IRIG	Iridescent Green
LISH	Lilac Shadow
LTCH	Light Chrome
LUMG	Luminous Green
METBL	Metallic Blue
METSH	Metallic Sunshine
MLGLD	Metallic Light Gold
MOL	Moonlight
NUT	Nut (only on Jet)
PARSH	Paradise Shine
RABDK	Rainbow Dark

REDM	Red Magma
ROGL	Rose Gold
SAT	Satin
SCGR	Scarabaeus Green designed by JPG
SSHA	Silver Shade
TRA	Transmission

### Translucent Effects

(Vacuum coating on the reverse side of the crystal, effect shines through the transparent crystal)



Effect Code	Name
BBL	Bermuda Blue
HEL	Heliotrope
MBL	Meridian Blue
SINI	Silver Night
TAB	Tabac
VL	Vitrail Light
VM	Vitrail Medium
VOL	Volcano

### Patina Effects

(Partial coating of the correspondingly modified effects)

Effect Code	Name
BLAPA	Black Patina
GOLPA	Gold Patina
ROSPA	Rose Patina
SILPA	Silver Patina
WHIPA	White Patina

**Shimmer Effects**

<i>Effect Code</i>	<i>Name</i>
001 SHIM	Crystal Shimmer
203 SHIM	Topaz Shimmer
208 SHIM	Siam Shimmer
211 SHIM	Light Sapphire Shimmer
214 SHIM	Peridot Shimmer
215 SHIM	Black Diamond Shimmer
226 SHIM	Light Topaz Shimmer
227 SHIM	Light Siam Shimmer
229 SHIM	Blue Zircon Shimmer
236 SHIM	Hyacinth Shimmer
246 SHIM	Light Colorado Topaz Shimmer
249 SHIM	Citrine Shimmer
259 SHIM	Tangerine Shimmer
360 SHIM	Erinite Shimmer
369 SHIM	Cobalt Shimmer
391 SHIM	Silk Shimmer
502 SHIM	Fuchsia Shimmer

**Lacquer<sup>PRO</sup> Effects**

A premium opaque varnish which is applied to the reverse side of the crystal instead of foiling, resulting in an opalescent appearance.

**Crystal Lacquer<sup>PRO</sup> Powder**

<i>Effect Code</i>	<i>Name</i>
L101	Powder Yellow
L102	Powder Green
L103	Powder Rose
L104	Powder Blue
L105	Powder Grey

**Crystal Shiny Lacquer<sup>PRO</sup>**

<i>Effect Code</i>	<i>Name</i>
L106S	Crystal Ivory Cream
L107S	Crystal Royal Red
L108S	Crystal Dark Red
L109S	Crystal Royal Green
L110S	Crystal Royal Blue
L111S	Crystal Dark Grey
L112S	Crystal Azure Blue
L113S	Crystal Peony Pink
L114S	Crystal Summer Blue
L115S	Crystal Mint Green
L116S	Crystal Light Coral

**Variations on Surface Effects****2x**

Both sides of the stone are treated with an effect (e.g. art. 5000AB 2).

**B**

Effects on three sides of a cube shape (e.g. art. 5601 AB B).

**V**

The effect is used in reverse. A surface effect is used like a translucent effect (e.g. art. 2420 NoHF SSHA V - Silver Shade on the reverse side).

**Z**

Only a part of the stone is treated with an effect (e.g. art. 4869 HEL Z).

**FC (Full Coated)**

Improved technology allows for the perfectly homogeneous, all-round application of high-intensity metallic effects in the Bead assortment (art. 5000).

**CAL'V'SI & CAL'VZ'SI**

The effect CAL (Comet Argent Light) is also used as a mirror coating on the reverse side of the crystal instead of standard foilings (A, F, ...) in special cases (e.g. art. 2035).

**/G**

Article with partly (PF) or fully frosted (FF) surface (e.g. art. 2611/G).

**PA (Patina)**

Innovative technology allows for the partly coated application of adapted effects. Its historical edge and "used" look give it a certain timelessness, without losing its crystalline appearance (e.g. art. 2034).

**Special Surface Effects**

































































Swarovski has been able to achieve special surface effects by using special chemical and mechanical processes on the surface of the crystals.



<i>Effect Code</i>	<i>Name</i>
MAT	Matt Finish

The Matt Finish effect is achieved by performing a chemical matting process on the entire surface of the crystal. Small variations in the size of the articles may occur as a result of this chemical process.

## COLORS

 Crystal 001	 Fuchsia 502	 Sapphire 206	 Emerald 205
 <u>White Opal</u> 234	 Ruby 501	 Capri Blue 243	 <u>Olivine</u> 228
 <u>Light Silk</u> 261	 Siam 208	 Dark Indigo 288	 <u>Greige</u> 284
 Silk 391	 Burgundy 515	 Montana 207	 <u>Light Grey Opal</u> 383
 <u>Light Peach</u> 362	 Amethyst 204	 <u>Turquoise</u> 267	 Light Colorado Topaz 246
 <u>Rose Water Opal</u> 395	 <u>Cyclamen Opal</u> 398	 Light Turquoise 263	 Jonquil 213
 <u>Vintage Rose</u> 319	 Purple Velvet 277	 Blue Zircon 229	 <u>Yellow Opal</u> 231
 <u>Blush Rose</u> 257	 <u>Tanzanite</u> 539	 <u>Indicolite</u> 379	 Light Topaz 226
 Light Rose 223	 <u>Violet</u> 371	 <u>Indian Sapphire</u> 217	 Sunflower 292
 <u>Rose Peach</u> 262	 Light Amethyst 212	 <u>Denim Blue</u> 266	 Topaz 203
 <u>Padparadscha</u> 542	 <u>Smoky Mauve</u> 265	 Black Diamond 215	 <u>Tangerine</u> 259
 Indian Pink 289	 Provence Lavender 283	 <u>Pacific Opal</u> 390	 <u>Light Smoked Topaz</u> 221
 Light Siam 227	 Light Sapphire 211	 <u>Chrysolite</u> 238	 Smoked Topaz 220
 <u>Scarlet</u> 276	 Light Azure 361	 Peridot 214	 <u>Smoky Quartz</u> 225
 <u>Indian Siam<sup>1</sup></u> 327	 Aquamarine 202	 <u>Erinite</u> 360	 <u>Graphite</u> 253
 Rose 209	 <u>Air Blue Opal</u> 285	 <u>Fern Green</u> 291	 Jet 280

GENERAL PRODUCT INFORMATION

The here presented colors and effects are based on the Round Stone color chart. For details on available colors and effects for each article within the product groups, please see the product matrix of the respective item in the Collection 2016.

For color and effect samples, please see the corresponding color chart.

**Classic Colors/Effects:** This color range offers a wide choice of traditional Swarovski crystal colors and effects.

**Exclusive Colors/Effects:** This color range is offered exclusively by Swarovski.

The plating resistance of effects is tested according to Swarovski's plating guidelines (SWAROVSKI-PROFESSIONAL.COM). Customers are advised to carry out their own tests if customers' plating parameters diverge from Swarovski plating guidelines.

\* Crystals are not resistant to plating and similar processing.

\*\* Crystals are resistant to plating only if they are F-foiled.

\*\*\* designed by Jean Paul Gaultier.

<sup>1</sup> The color Indian Siam is available only for a specific size range.

Please refer to the current Collection.

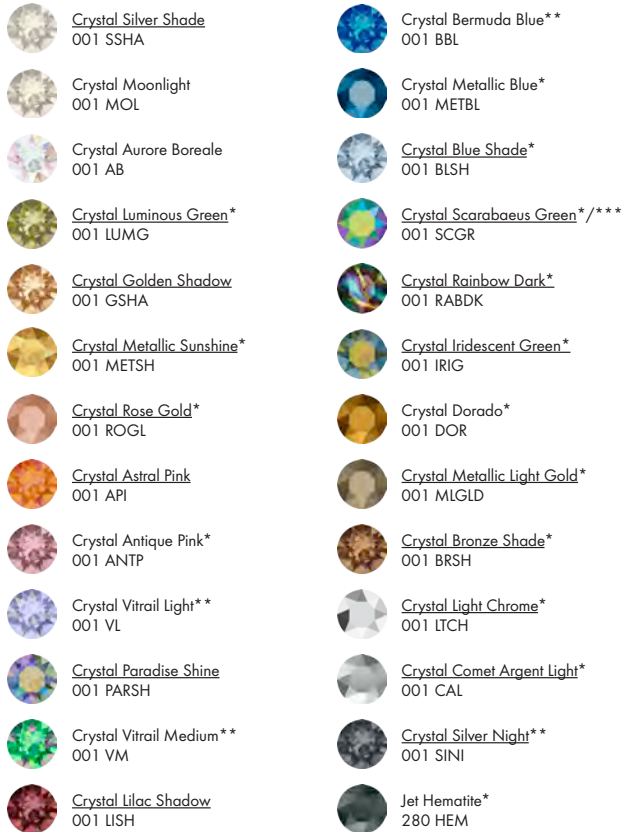
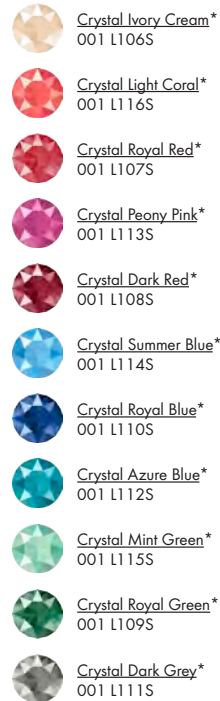
Colors and effects can appear different when illuminated with different light sources. Swarovski uses standard light source D50 for color decision and comparison. Slight changes in shades are unavoidable. Colors may vary according to cut and foiling.

All Swarovski crystals are made in the innovative, lead free Advanced Crystal Standard and are in compliance to the strictest regulatory industry norms and laws regarding the restriction or prohibition of certain substances in the most relevant segments of our customers. Please find further information in the product compliance part on [www.swarovski-professional.com](http://www.swarovski-professional.com)

For further information please visit [swarovski-professional.com](http://swarovski-professional.com)

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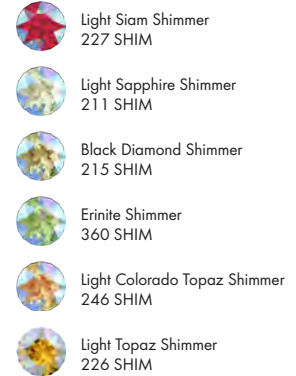
## EFFECTS

CRYSTAL LACQUER<sup>PRO</sup>  
EFFECTSCrystal Lacquer<sup>PRO</sup> PowderCrystal Shiny Lacquer<sup>PRO</sup>

## CRYSTAL PATINA



## SHIMMER EFFECTS



## TESTING THE PLATING RESISTANCE

For testing the plating resistance of effects, the following parameter settings have to be considered:

Setting up the stand	
	▼
Electrolytic degreasing	$t < 1 \text{ min}$ , $3 \text{ A/dm}^2$ , $\text{pH} < 12$ , $T < 45 \text{ }^\circ\text{C}$ (113 °F)
	▼
Rinsing	$t = 30 \text{ sec}$ , $T < 25 \text{ }^\circ\text{C}$ (77 °F)
	▼
Pickling	$t < 20 \text{ sec}$ , $\text{pH} \sim 1$
	▼
Rinsing	$t = 30 \text{ sec}$ , $T < 25 \text{ }^\circ\text{C}$ (77 °F)
	▼
Bright copper plating	$t < 15 \text{ min}$ , $3 \text{ A/dm}^2$ , $\text{pH} < 1$ , RT
	▼
Rinsing	$t = 30 \text{ sec}$ , $T < 25 \text{ }^\circ\text{C}$ (77 °F)
	▼
Palladium interim coating	$t < 5 \text{ min}$ , $1 \text{ A/dm}^2$ , $\text{pH} < 8$ , RT
	▼
Rinsing	$t = 30 \text{ sec}$ , $T < 25 \text{ }^\circ\text{C}$ (77 °F)
	▼
Gold finishing	$t < 5 \text{ min}$ , $1 \text{ A/dm}^2$

**Note:** Swarovski cannot warrant the resistance of effects when the parameters as set out above are changed. Swarovski's declaration of resistance does not discharge customer from carrying out its own tests of the suitability for the intended finishing of products. The use and processing of these techniques and products are solely the user's responsibility.

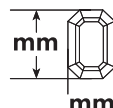
## SIZES

•	PP 0 0.70–0.80 mm	•	PP 23 (SS 11) 2.90–3.00 mm	•	SS 30 6.32–6.50 mm	•	SS 47 10.54– 10.91 mm
•	PP 1 (SS 000) 0.80–0.90 mm	•	PP 24 (SS 12) 3.00–3.20 mm	•	SS 31 6.50–6.68 mm		
•	PP 2 (SS 00) 0.90–1.00 mm	•	PP 25 (SS 13) 3.20–3.30 mm	•	SS 32 6.68–6.87 mm	•	SS 48 10.91– 11.30 mm
•	PP 3 (SS 0) 1.00–1.10 mm	•	PP 26 (SS 13) 3.30–3.40 mm	•	SS 33 6.87–7.07 mm		
•	PP 4 (SS 1) 1.10–1.20 mm	•	PP 27 (SS 14) 3.40–3.50 mm	•	SS 34 7.07–7.27 mm	•	SS 49 11.30– 11.72 mm
•	PP 5 (SS 2) 1.20–1.30 mm	•	PP 28 (SS 14) 3.50–3.60 mm	•	SS 35 7.27–7.48 mm		
•	PP 6 (SS 2) 1.30–1.35 mm	•	PP 29 (SS 15) 3.60–3.70 mm	•	SS 36 7.48–7.70 mm	•	SS 50 11.72– 11.97 mm
•	PP 7 (SS 3) 1.35–1.40 mm	•	PP 30 (SS 15) 3.70–3.80 mm	•	SS 37 7.70–7.93 mm		
•	PP 8 (SS 3) 1.40–1.50 mm	•	PP 31 (SS 16) 3.80–4.00 mm	•	SS 38 7.93–8.16 mm	•	SS 55 12.97– 13.22 mm
•	PP 9 (SS 4) 1.50–1.60 mm	•	PP 32 (SS 17) 4.00–4.10 mm	•	SS 39 8.16–8.41 mm	•	SS 60 14.22– 14.47 mm
•	PP 10 (SS 4) 1.60–1.70 mm	•	PP 33 (SS 17) 4.10–4.20 mm	•	SS 40 8.41–8.67 mm		
•	PP 11 (SS 5) 1.70–1.80 mm	•	SS 18 4.20–4.40 mm	•	SS 41 8.67–8.95 mm	•	SS 65 15.47– 15.72 mm
•	PP 12 (SS 5) 1.80–1.90 mm	•	SS 19 4.40–4.60 mm	•	SS 42 8.95–9.23 mm	•	SS 70 16.72– 16.97 mm
•	PP 13 (SS 6) 1.90–2.00 mm	•	SS 20 4.60–4.80 mm	•	SS 43 9.23–9.53 mm		
•	PP 14 (SS 6) 2.00–2.10 mm	•	SS 21 4.80–4.90 mm	•	SS 44 9.53–9.85 mm	•	SS 75 17.97– 18.22 mm
•	PP 15 (SS 7) 2.10–2.20 mm	•	SS 22 4.90–5.10 mm				
•	PP 16 (SS 7) 2.20–2.30 mm	•	SS 23 5.10–5.27 mm				
•	PP 17 (SS 8) 2.30–2.40 mm	•	SS 24 5.27–5.44 mm				
•	PP 18 (SS 8) 2.40–2.50 mm	•	SS 25 5.44–5.61 mm				
•	PP 19 (SS 9) 2.50–2.60 mm	•	SS 26 5.61–5.78 mm				
•	PP 20 (SS 9) 2.60–2.70 mm	•	SS 27 5.78–5.96 mm				
•	PP 21 (SS 10) 2.70–2.80 mm	•	SS 28 5.96–6.14 mm				
•	PP 22 (SS 10) 2.80–2.90 mm	•	SS 29 6.14–6.32 mm	•	SS 46 10.19– 10.54 mm		

Various measurement abbreviations are used to classify the jewelry stones.

**PP, SS**

Pearl Plate (PP), Sieve Size or Stone Size (SS) for round crystals.

**mm**

Metric figures in millimeters for crystal components and geometric forms.