1. MECHANICAL DEFECTS

1.1. Stitching

It is a visually and acoustically detectable defect. Silver dots are visible in the reflection of the record, forming clusters and chains. It comes from the press as a result of the record being incorrectly unstuck from the mould, when both molds come off the record at the same time. Visually, the defect is acceptable unless audible by so called 'stitching'.

Stitching:	
	For the standard in general: A critical defect that is not acceptable if audible.

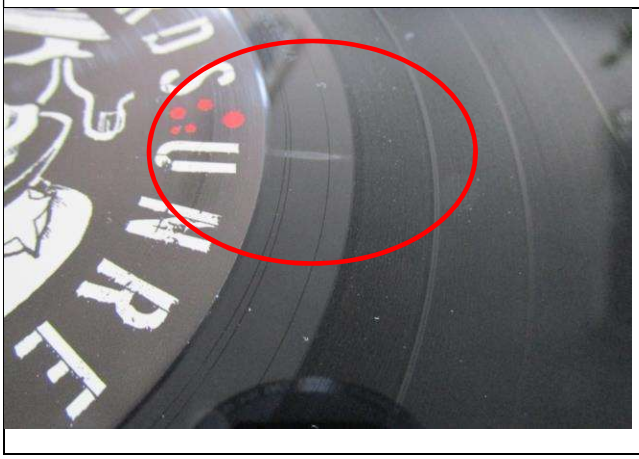
1.2. Non-fills

There are visible silver lines in the reflection on the record, so-called nests of fine depressions. The grooves of the record are not copied, the material is missing on the upper edge of the groove. They usually appear on the edge of the record, in lead-in and lead-out, not always audible.

Non-fills:	
	For the standard in general: A critical defect that is almost always unacceptable if audible.

1.3. Scratches (damaged stamper):

There is a visible scratch on the record that is permanently in one place. The stamper has been damaged during the pressing process.

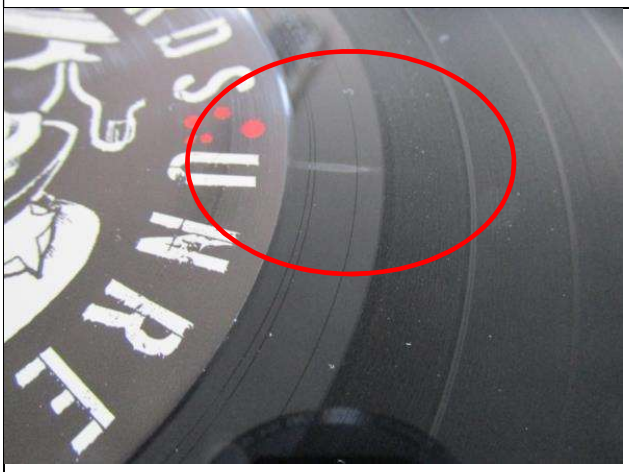
OK	NOK
The defect must not affect the audio quality. Hairline and fine scratches only on the vinyl surface, especially on the non-groove/mirror area. The length of the scratches must not exceed 2cm and the thickness must not exceed 0.5mm.	All scratches that affect the audio quality. Scratches more than 2cm in length and more than 0.5mm in thickness are unacceptable.
	

1.4. Scratches (damaged by handling):

Defect description: There are visible clusters of parallel grooves on the record surface. The root cause is unprofessional rough handling.

Risks: Surface scratches are largely influenced by the inner sleeve used, which can have an impact on mechanical damage to the record.

Recommendation: In terms of protecting the record from damage, the most effective is a poly-lined sleeve, then a microtene or PE sleeve, then a printed sleeve using a laminate on the inside (PREMIUM).
Lower protection of the records is provided by standard white/black inner sleeve which can cause hairline scratches on the mirror and in the grooves. In addition, these sleeves can release fine paper sponges from their edges. A printed paper sleeve and a discobag are worse for protection of the record (fine scratches on the mirrored area and in the recording, releasing of paper residues from the sleeve edges with no influence on the sound quality). Least suitable material is carton (card record) and art paper which is causing scratches on vinyl records with no influence on the sound quality.

OK	NOK
The defect must not affect the audio quality. Hairline and fine scratches only on the vinyl surface, especially on the non-groove/mirror area. The length of the scratches must not exceed 2cm and the thickness must not exceed 0.5mm.	All scratches that affect audio quality. Scratches more than 2cm in length and more than 0.5mm in thickness are unacceptable.
	

1.5. Cold centre

Defect description: Due to insufficient heating, the centre of the record is deformed and too thick and the other way round, due to overcooling, the centre hole is small.

Cold centre:	
	For the standard in general: Unaccebtable defect in any case.

1.6. Dirt and other residuals

Defect description: The record contains a particle that creates a protrusion or visible paper particle on the surface. The defect is caused by processing of contaminated pressing material (burnt pieces or paper).

	For the standard in general: Unaccebtable defect in any case.

1.7. Warped records

Defect description: The root cause is a high inner tension during the maturity process or a long-term unsuitable storing.

Risks: In case of special orders with only one label (e.g. shaped picture disc) the record will always be warped, the tolerance is max. 5mm. In case of vinyl effects that use more than 1 colour (e.g. splatters, Aside/Bside, Colour in Colour etc.) the record might be warped due to the different properties of colour compound, the tolerance is max. 2mm.

Standard

Warping must not affect the playing of record on a turntable.
The tolerance for standard one colour record is max. 2mm.

There are two ways of measuring warping:

1. With a special device similar to record player, that has a laser deviation gauge which measures the height difference between minimal and maximal values during rotation from lead-in to lead-out. Both dish warping and propeller warping can be measured with this device.

2. With a manual device similar to a rule. The record has to lie on a even surface hat-like (not dish-like) and the distance between surface and record is measured in the centre hole. Only dish warping can be measured with this device.

1.8. Stains and smudges on records

Description of the defect: The vinyl material (cake) contains extraneous ingredients, most often black material. We distinguish two types of stains/spots – visible dotted stains, mainly black and smudges.

OK	NOK
The accepted area of these spots shall not exceed 6 mm^2 of the total area for compact, homogeneous stains whose colour is distinctly different from the rest of the record and 350 mm^2 of the total area for spots (smudges) that are not compact, more like a shade or spots with different colour intensity. The reference area is the entire record area including the label. The coverage of stains is calculated as wwhole. The total of all stains on one side may not exceed the values stated above.	The area of the spots exceeds 6 mm^2 of the total area for compact spots and 350 mm^2 of the total area for not compact spots (smudges).
	

1.9. Vinyl colour

Description of defect: The vinyl colour does not correspond to the vinyl colour chart.
Color options:
A: Standard color swatch #1 - #14
B: Standard colour swatches P1 - P26 and N1 -N6
C: Special colours – Colours mixed up on customer request, samples are subject to customers' approval. This is a paid service
Risks: There are specific metallic single coloured records gold, bronze and silver. The pigment composition causes uneven spillage of a colour, especially in the area without recording, resulting in coloured "waves" on a vinyl record – a relief with a different colour shade. This effect doesn't influence the recording/sound quality (lead-in groove, lead-out groove, mirror). These characteristics cannot be subject to claim.

OK	NOK
Maximum colour deviation within two Pantone colour grades.	A colour deviation exceeding one grade of the Pantone Swatch.
	

1.10. Blisters

Blisters on the vinyl usually occurs during coating of the cake with splatters, when there is insufficient plastification of the coated mixture during pressing. They form on the vinyl surface and cause an acoustic issue.

	For the standard in general: The defect is unacceptable in any case when the blister exceeds the vinyl surface.

2. LABEL DEFECTS

2.1. Label cut

The sheet of paper was shifted during the cutting process. The accepted tolerance is ±2mm.

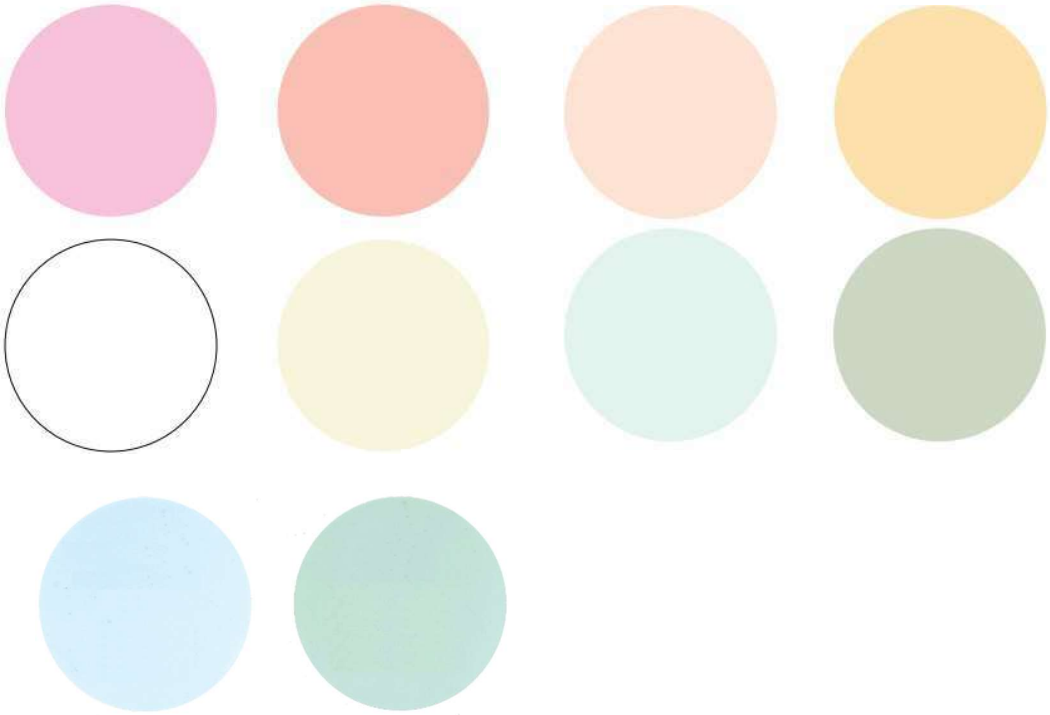
OK	NOK
The cut is moved by ±2mm without cutting the label text.	The cut is moved by more than ±2mm or the label text is cut off.
	

2.2. Colour change of labels

All labels are subject to a drying process at high temperatures in order to remove the redundant moisture and to prevent from a bubbling of labels during the vinyl pressing. Due to the drying it may happen that labels change the colouring. This effect is more visible on light and PMS colours.

OK (this is not showing all possible variants)

Before drying | After drying | Before drying | After drying



2.3. Wrong labels

The labels do not match the label preview. Different labels have been used or the labels of each side have been switched.

NOK

	A critical defect that is always unacceptable.

2.4. Double label

The label is blown throughout the entire surface and is doubled.

NOK

	This is a critical defect which is in any case unacceptable.

2.5. Cracked label

Description of defect: The labels cracks during the pressing and label pars are shifted.
Risks: Cracked labels occur mostly on multi-coloured records as half/half, tri-coloured, splatters/haze, colour in colour or Aside/Bside. The unpredictable paper tension during pressing is causing cracks or label folding due to use of different compound with different mechanical properties during pressing.

OK	NOK
Hairlines splits, mainly on coloured records, the text is still legible.	The vinyl material is visible through the label split. The label text is illegible.
	

2.6. Blisters on labels - Picture disc

An incorrectly adhered foil picture disc to the label causing a blister.

OK	NOK
The area of all blisters is up to 100mm^2 and blisters are located in the centre of the label.	The area of all blisters is greater than 100mm^2 or blisters are located off center.
	

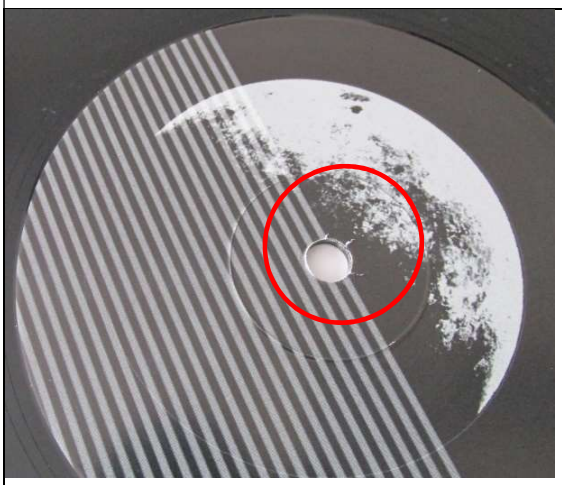
2.7. Blisters on labels

Insufficiently dried colour becomes plastic on the hot stamper surface and stick on the stamper. When opening the pressing machine the colour is teared off or splitting the paper layers resulting in blisters.

OK	NOK
The area of all blisters is up to 100mm^2	The area of all blisters is greater than 100mm^2
	

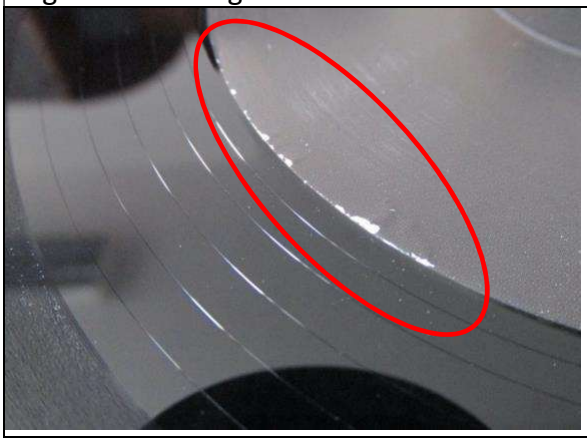
2.8. Torn label at the centre hole

The label is torn by the centre pin when it is inserted into the press.

OK	NOK
The tear may only be of a hairline nature. The top layer of the paper must not be torn off. The tear size is up to 5mm at the centre hole.	The top layer of paper is torn off and a white area is created.
	

2.9. Ripped colour on labels

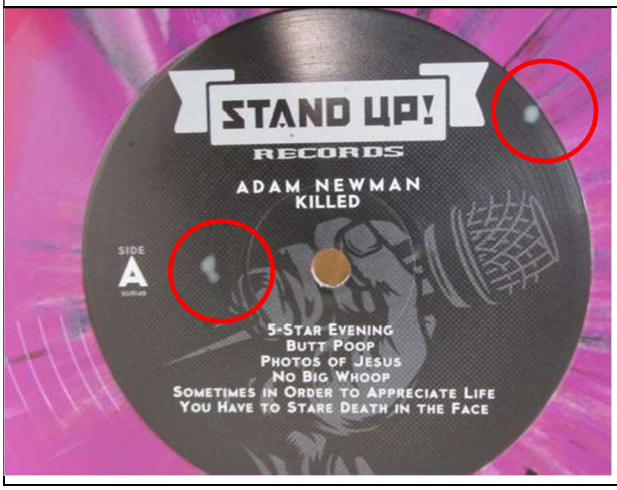
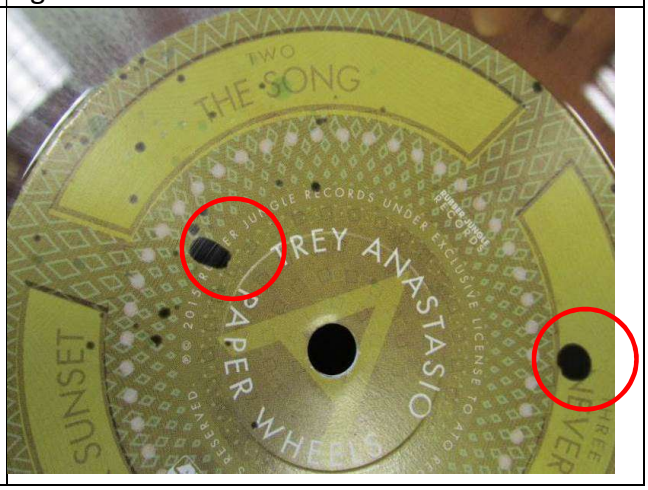
Insufficiently dried colour becomes plastic on the hot stamper surface and stick on the stamper. When opening the pressing machine the colour is teared off or splitting the paper layers resulting in blisters.

OK	NOK
The tear along the edge of the label may be no more than 3cm in circumferential length. The defect must not cause the text to be illegible or missing.	The tear in the edge of the label is larger than 3cm.
	

2.10. Label stains

They usually occur on splattered records when some of the material gets on the label during the pressing process. These are supposed to be rejected only if the information content is damaged or the sum of the areas of the stain exceeds 1.5% of the label area.

1.5% of the label area = 100mm^2 which can be imagined as a 10mm x 10mm square

OK	NOK
The sum of the areas of all spots must not exceed 100mm^2 . Texts must be legible.	The sum of the areas of all spots is greater than 100mm^2 or the spots prevent the text from being legible.
	

2.11. Scratches on labels

The defect is caused by rough mishandling. The label is rubbed against the centre pin when removing the record from the press.

OK	NOK
The polishing of the label surface is not damaging the top layer of the paper. The total number of affected labels does not exceed 10% from the run.	The top layer of the paper is damaged.
	

2.12. Contamination of labels

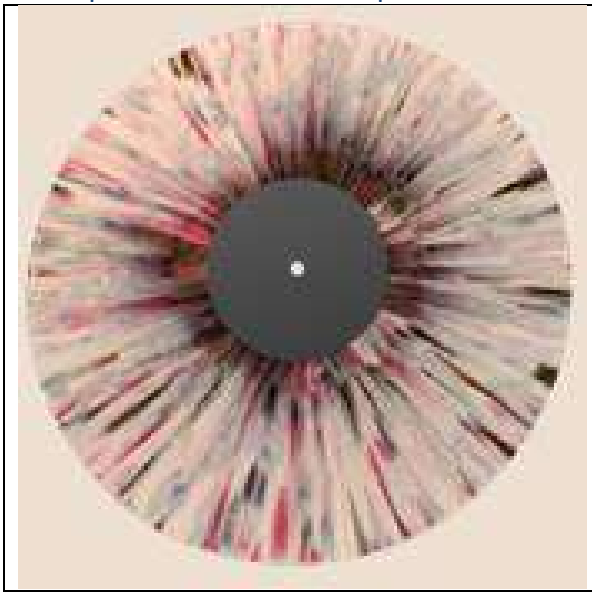
Contamination can occur during handling or during the packaging of the record.

OK	
	Contamination is acceptable if the total area is not more than 100mm^2 and is only at the centre of the label.

3. COLOR EFFECTS

3.1. Splatter Record (Splatters)

Risks and recommendations: When using more splatter colours it cannot be guaranteed that all of them will be visible. Black colour and dark solid colour used as a base colour absorb splatter colours. The result is splatters are less visible. Furthermore when using solid colours as a base colour combined with transparent splatter colours the final effect may be less visible or even imperceptible. We recommend using of transparent colours as a base to achieve a higher contrast. The amount of splatters cannot be defined. Splatters cannot be used on 7” heavy vinyl records. Improper combinations cannot be subject to claim.

Standard	Wrong combination
Transparent with coloured splatters	Solid purple with solid green splatters
	

3.2. A side / B side (A/B side)

Risks and recommendations: The most suitable combination is to use an opaque with contrasting colour. If a dark opaque colour together with a light transparent colour are used, the effect will be less visible.

Recommended combinations of contrast colours are white and black, white and red, blue and white.

Unsuitable combinations where the effect will be less visible are, for example, black and red, red and orange, dark blue and black.

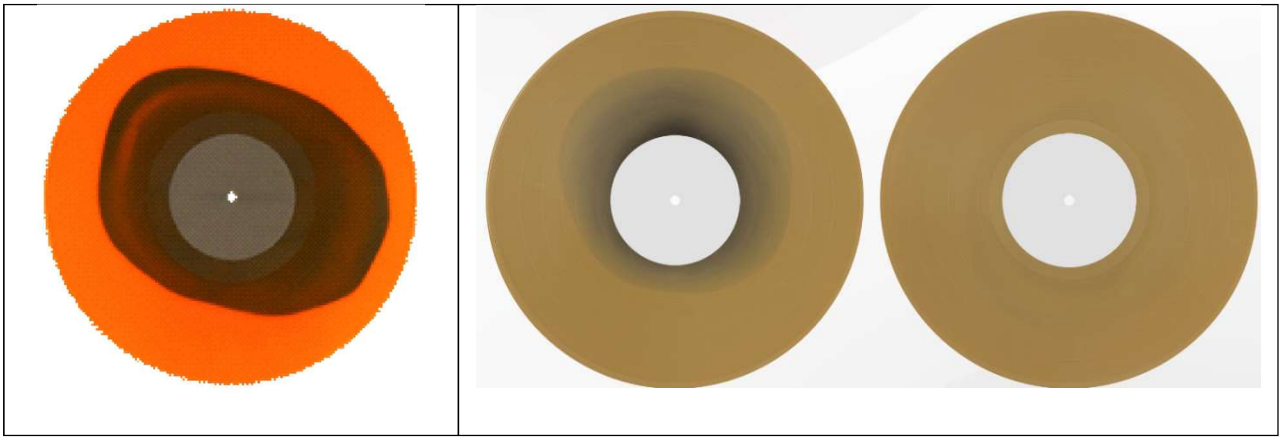
Standard	Inappropriate combination
(black with opaque green)	(black with opaque red)
	

3.3. Color in color (Color in color)

Risks and recommendations: It is pressed like a small cake into a big cake. When the small cake is opaque and the large one is transparent, the colours are sharply divided. It is advisable to use contrasting colours ideally a large cake transparent light colour and a small cake opaque dark colour. Caution - it does not work reversely. When both cakes are opaque, the intersection is random and blended and it is more of a side A/B side effect. If an opaque base is used, the effect is only visible on side A and is not guaranteed to be visible on side B.

Standard (opaque green in transparent orange)

Inappropriate combination (black in P18)



3.4. Half (Half/half)

Risks and recommendations: It is pressed like two cakes folded side by side. With multiple contrasting colours, contamination of the colour from one half to the other may occur at the point of transition. The best combination is two opaque colours or two transparent colours.
This effect may cause fine cracks to form on the label or the label to wrinkle at the point of colour transition.

Standard

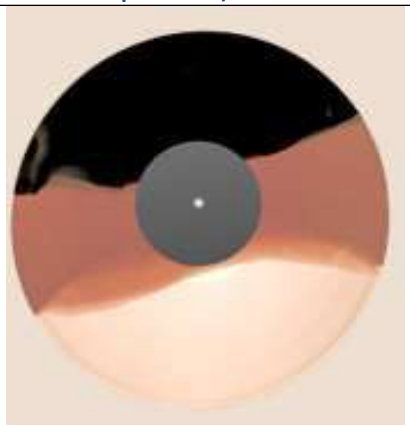
(opaque orange with opaque red)

3.5. Color striped vinyl

Risks and recommendations: It is pressed as three cakes stacked side by side. With multiple contrasting colours, contamination of the colour from one part to the other may occur at the point of transition. A combination of transparent and opaque colours may be used. In this type of the record, the label may be creased at the point where the cakes join.
This effect may cause fine cracks to form on the label or the label to wrinkle at the point of colour transition.

Standard

(black with opaque brown and transparent)

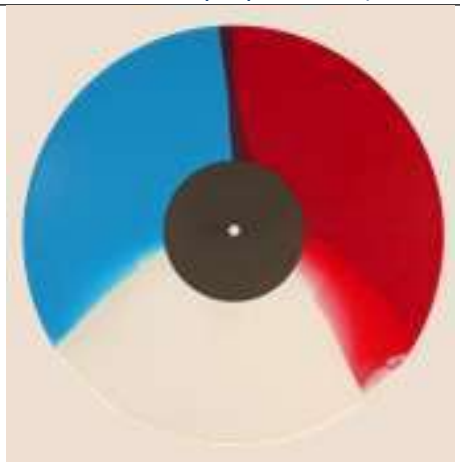


3.6. Segments 120° / Color segment vinyl

Risks and recommendations: It is pressed as three cakes stacked side by side. With multiple contrasting colours, contamination of the colour from one part to the other may occur at the point of transition. A combination of transparent and opaque colours may be used. In this type of record, the label may be creased at the point where the cakes of colour join.
This effect may cause fine cracks to form on the label or the label to wrinkle at the point of colour transition.

Standard

(opaque blue with transparent red and opaque white)



3.7. QUAD effect

Risks and recommendations: It is pressed as four cakes stacked side by side. A combination of transparent and opaque colours can be used. The colours merge (e.g. opaque into transparent, there is a green stripe between yellow and blue, etc.).
This effect can cause fine cracks to form on the label or the label to wrinkle at the point of colour transition.

Standard

(Two opaque colours)

3.8. CORNETTO effect

Risks and recommendations: The cornetto effect creates rays on the record. These can be 3, 4, 5 or 6 rays on the base colour. It is recommended to use a combination of a transparent base colour and opaque rays in it. The effect also works in combinations of two transparent or two opaque colours but it is important to use contrasting colours.
By specifiyng an opaque base and transparent rays, the effect will not be visible enough from both sides.
It is not recommended to use an opaque base and transparent rays.

Standard

(Base transparent red and rays opaque white)

3.9. TRICOLOR (three cakes on each other)

Risks and recommendations: Opaque and contrasting colours are used, pressing three cakes on top of each other (same size). The order of colours is determined by the colour of the cake according to the orientation to the sides of the record. The colour effect is random. For best results, it is recommended to use contrasting colours.

Standard

(3 opaque colours)

3.10. TWISTER effect

Risks and recommendations: Twister is produced by using three colours. However, its production is difficult due to the segmentation of the cakes. These are always symmetrical and mirror each other. It is recommended to use contrasting colours to make the effect stand out as much as possible. It is possible to use both opaque and transparent colours. The size of the central stripes depends on the combination of opaque and transparent colours used.
By specifiyng an opaque base and transparent rays, the effect will not be visible enough from both sides. The effect cannot be produced with splatters.
It is not recommended to use a opaque base and transparent rays.

Standard

(base transparent and rays opaque)

3.11. CLOUDY effect

Risks and recommendations:The cloudy effect is transparent and gives the impression of a veil or cloudy sky. There are always three colours used, a base colour and two complementary colours. The first additional colour determines the colour of the whole record and the second additional colour determines the colour of the granulate in which part of the cake must be coated. The second complementary colour must match the first complementary colour.

Standard

(base transparent P15 and opaque colour)

3.12. GALAXY effect

Risks and Recommendations: The effect is made up of two or three colours and is similar to the effect of a marbled record. Any transparent and opaque colours can be used.
The combination of two transparent colours may cause the effect to fade.

Standard

(Opaque and transparent colour)

3.13. RANDOM MIX OF COLORS

Risks and recommendations: Colour mix is made from coloured recyclate and is random according to the material available in the production. This effect is produced as a classic record and by selecting a random mix in the color menu. For re-orders, it is not possible to repeat exactly the same color mix of the effect. With each repeating order, the effect and color combination is random.

Standard

(MIX)

3.14. Glow in the dark records

Risks and recommendations: Glow-in-the-dark records are made of special material, which is only available in a shade of green. It is important to note that in daylight it is neutral and has no colour. This shade is produced in combination with the clear material (C14).
When viewed against the light, it is possible to observe a lack of colour spill which is caused by the luminous pigment. This defect is acceptable.

Standard

(Green luminous pigment)

3.15. Marble vinyl

Risks and recommendations: This is the effect that causes the smoke effect on the record. For this type, the base colour must be a light transparent colour and the colour forming the marble must be a dark opaque, ideally black. This is an effect where the same result cannot be guaranteed on the whole run.
The recommended combinations are base color #14 or P15 with a darker color such as black, #5, #4, #3, #12, P14, P15, P11. Of course, other colors are also possible, but the base color must be as light as possible, ideally #14 or P15.

Standard
(transparent with black)

Standard
(transparent P6 with black)

3.16. Etched image / ETCHED VINYL

Risks and recommendations: The etched image cannot be combined with the recording. The etched image can be with or without a label, but there should always be a label on the record side. The centre ring on the record is blank. The size of the detail displayed depends on the size of the etched area, or the ratio of etched/unetched area.
The etched surface is not glossy, it is matt and may show different shades.
In case of using only one label, there is a high risk of a warped record up to a maximum of 4mm.

Standard

3.17. Picture disc

Risks and recommendations: The vinyl record with a full or shaped label on both sides covered by a plastic foil with pressed-in grooves. Two labels are used.
If recording is required on one side of the PD only, then there cannot be a "mirror" (smooth surface without recording) on the other side, but there must be a "silent groove" (groove without signal). The addition of a 'silent groove' is required even if the record does not cover the entire surface of the record (prevention of label tearing, elimination of foil wrinkling and record curling). PDs are produced as heavy vinyls only. The PDs may show defects in the form of smudges (folded, wrinkled foil). Wrinkled foil occurs particularly in areas where there is no label between the foil and the compound. If the legibility of the text is not affected or the label design is not significantly deformed, this cannot be the subject of a complaint. Furthermore, as a result of the recording being made in a non-standard material, this type of record may exhibit impaired acoustic properties, in particular increased noise and crackling. These deteriorated acoustic properties cannot be the subject of a complaint. Nor can a record (PD) containing a moiré be classified as defective, this effect being caused by interference between the grooves of the record and the printing grid of the label, which is printed by offset printing with a CMYK colour model using standard grids (175lpi).

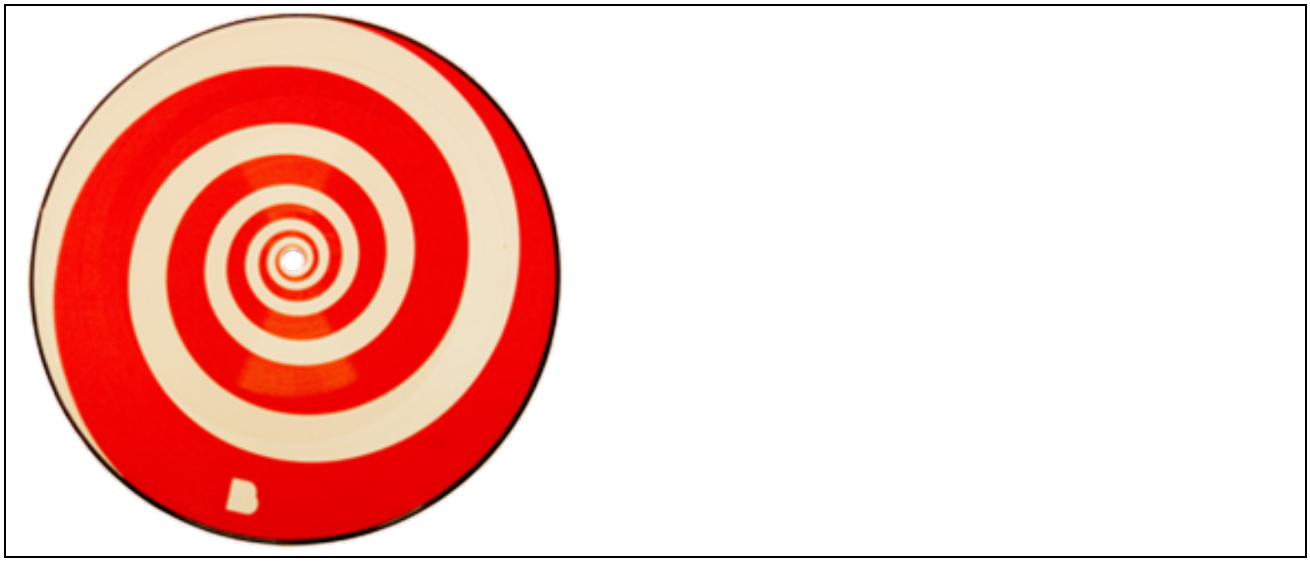
3.17.1. Picture disc with full-width labels

If they are to be oriented according to the customer's wishes, they must be specified in the order (head to head).

3.17.2. Picture disc with shaped labels

The shape of the labels is limited. Labels fit on top of each other. The tolerance of mutual shift of labels is 5mm on the edge of the label farthest from the center. Manufacturing will try to limit the offset but no guarantee. If clear or ultra-clear material is to be used, we recommend that the label graphics on the reverse be matched (in color) to the face of the opposing label. Reason: we do not guarantee the exact face of both labels, meeting the condition eliminates the visibility of label shift.
A special kind of records are those where a shape label is used on one side and a circular label with a maximum diameter of the inscribed circle (inscribed in the shape of the shape label) on the other.

Standard



3.18. SHAPE DISC

Risks and recommendations: A record that is cut into various geometric shapes by milling. The shapes of the record are determined by the customer through a drawing. The minimum radius that can be used is 3mm. When determining the shape of the record, it is necessary to base the record on type 30 or 25 (12" or 10"), leaving intact a minimum diameter of 175mm centric with a central hole (see following figure). In case a shaped PD is required, only as heavy vinyl.

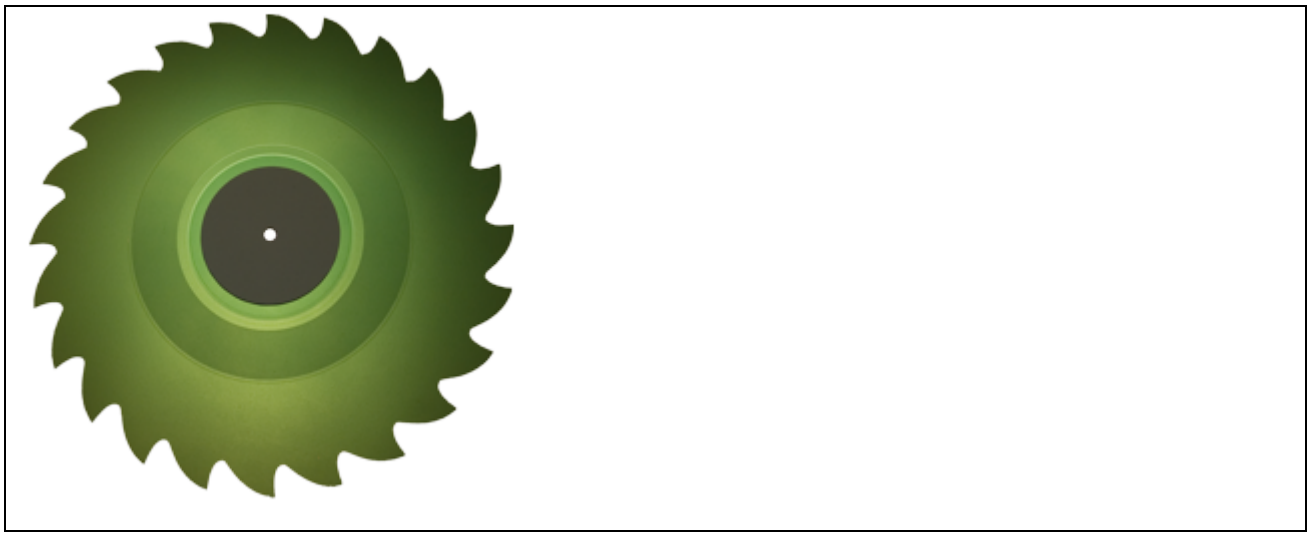
3.18.1. Shape disc - picture disc

The semi-finished product for shaped PD is PD with shape labels, see chapter 3.17.2.
In case of a variant with two identical non-circular labels, these must be 7- 8mm smaller than the required cut. The trimming is governed by the label on side A. Due to the tolerance of label positioning, this means that the label on side B does not need to be centred to the trimming. This asymmetry in the distance of the edge of the label from the edge of the record cannot be the subject of a claim. In case of the variant with one shape and one circle label, the shape label must be 2-3mm smaller than the required bleed. The trimming is governed by the shape label.
These records are subject to all the exceptions to the properties listed in Section 3.17. Also note that the record area limitations result in a proportionately shorter playing time.

3.18.2. Shape disc - classic disc

The blank for the molded record is a conventional record (meaning not PD) of 10" or 12" size, standard weight or heavy records.

Standard



3.19. Picture disc Shape

Risks and recommendations: The records have degraded acoustic properties, for example increased noise and crackling. Classical xmusic or music with long quiet passages is not suitable for this type of record.
The PD label must be at least 3mm smaller than the required shape. Only one-sided PDs can be shaped, which always leads to deformation of the record. The shape of the label shall not contain radii smaller than 3mm. The shape of the label should not contain narrow areas which risk cracking of the label. The curvature of double-sided label records can be up to 5mm maximum.
For complicated shapes, the label profile must be tested by the pressroom technologist before serial production is ordered.

Standard	NOK
	

NOTE: For the production of records according to 3.17.2 and consequently 3.18.1, TPs with white labels of the shape corresponding to the order must be ordered. Also, the record must match the job and, in the case of trimming, the trimming. This is important for feasibility verification.

3.20. Half colour in colour

Risks and recommendations: It is pressed as a half/half record with a small cake in the middle. When the small cake is opaque and the large one transparent, the colours are bordered. It is advisable to use contrasting colours, ideally a half colour of light transparent and a small cake in the middle of a opaque dark colour. Caution – it does not work reversaly. If half opaque colours are used, the effect is only faintly visible on the A side and is not guaranteed to be visible on the B side.

Standard (half/half vinyl P15 a P6 and small cake of P12)

3.21. Tri-colour (three cakes in a cone)

Risks and recommendations: The most suitable combination is to use a very light transparent base colour, the second colour should also be a transparent contrast to the base colour and the last colour should be a dark opaque colour.

Suitable combination for example base #10 - #9 - black

Using only opaque colors will not produce the desired effect and will result in a matching three-color record with three cakes on top of each other.

Standard (#10 - #9 – black)

3.22. Tripple button

Risks and recommendations: The triple button effect is not coated. It is recommended to use a combination of a base transparent color and in it opaque cakes. The effect also works in combinations of two transparent colours, but it is important to use contrasting colours.
By specifying an opaque base colour and an opaque inner cake, the effect will not work. It is not recommended to use an opaque base and transparent cakes.

Standard (clear base and opaque red cakes)

3.23. Spinner

Risks and recommendations: The spinner is produced by using two colours. However, its production is difficult due to the segmentation of the cakes. These are always symmetrical. It is recommended to use contrasting colours to make the effect stand out as much as possible. It is possible to use both opaque and transparent colours.
By specifying an opaque base colour and an opaque inner cakes, the effect will not be visible enough from both sides. The effect can be specified with a maximum of 3 colours.
It is not recommended to use an opaque base and transparent inner cakes.

Standard (transparent red base and black spinners)

3.24. Moon phase

Risks and Recommendations: Moon phase is produced by using two colours. It is recommended to use contrasting colours to make the effect stand out as much as possible. It is possible to use both opaque and transparent colours.
By specifying an opaque base colour and an opaque inner cakes, the effect will not be visible enough from both sides. The effect can be specified with a maximum of 3 colors for the outermost cakes. The whole record is not coated.
It is not recommended to use an opaque base and transparent edge cakes.

Standard (base transparent blue and opaque white at the edges)

3.25. Butterfly

Risks and recommendations:Butterfly is produced by using two colours. It is recommended to use contrasting colours to make the effect stand out as much as possible. Both opaque and transparent colours can be used.
By specifying an opaque base colour and an opaque inner cakes, the effect will not be visible enough from both sides.The effect can be specified with a maximum of 3 colors for the outermost cakes. The whole record is not coated.
It is not recommended to use an opaque base and transparent edge cakes.

Standard (P6 base and transparent red at the edges)

3.26. Insomnia

It is a combination of marble effect and splatters.
Risks and recommendations: This is the effect that causes the smoke effect on the record with splatters.
For this type the base color used must be light transparent and the color forming the marble must be dark opaque, ideally black. This is an effect where the same result cannot be guaranteed on the entire production run.
The recommended combinations are base color #14 or P15 with a darker color such as black, #5, #4, #3, #12, P14, P15, P11. Of course, other colors are also possible, but the base color must be as light as possible, ideally #14 or P15.

Standard (P15 base and black marble with opaque white and opaque grey splatters)