

BRILLIANT Piano Black Dye HIGH COLOR STRENGTH AND TRANSPARENCY! EXCELLENT FASTNESS AND RESISTANCE! FEW DUST!



Presol Black 38

Technical Data Sheet

Version: 3.0.1 Rev. Date: 05/12 / 2022

| PRODUCT DESCRIPTION | |
|---------------------|-----------------|
| Color Name | Presol Black 38 |
| C.I. No. | N/A |
| CAS No. | N/A |
| EC No. | N/A |
| Chemical Type | N/A |
| Chemical Formula | N/A |

| FULL SHADE | REDUCTION (1:10 TiO2) |
|------------|-----------------------|
| | |
| | |
| | |
| | |
| | |

PRODUCT PROFILE

Presol Black 38 is a mixed black solvent dye with bluish shade. It has good tinting strength, excellent light fastness and heat fastness. It is applied to the coloring of styrenic engineering plastics. The performance of Presol Black 38 used in polyester fiber is excellent, including light fastness, wash fastness, rubbing fastness etc.

| STRUCTURAL FORMULA | | | | | | |
|--------------------|-----|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | N/A | | | | | |
| | | | | | | |
| | | | | | | |

PHYSICAL DATA Dark Powder Appearance 1.35 Density [g/cm³] 300 Bulk Volume [kg/m³]

| FASTNESS PROPERTIES | |
|-----------------------------------|-----|
| Migration [PS] | 5 |
| Light Fastness [1/3 SD] [PS] | 7~8 |
| Heat Resistance [°C] [1/3 SD][PS] | 300 |

| APPLICATION PROFILE | | | | | |
|---------------------|---|----------------|---|----------------|--------|
| PS | • | SB | • | ABS | • |
| SAN | • | PMMA | • | PC | • |
| PVC-U | • | PPO | - | PET | • |
| POM | 0 | PA6/66 | Х | PBT | 0 |
| PES | - | | | | |
| • = recommended | | o= limited use | | x = not recomm | nended |

| STANDARD PACKAGING |
|---|
| 25kg Bags/Carton/Drum |
| Different types of packaging are available on request |

The data given in this file is based on the present state of our knowledge and experience. Customers are allowed to make your own tests and assessments because of many possible factors which can affect the result and performance of our products in practical application. A legal liability for any of the properties or suitability for a specific usage can't be concluded from data. It is the buyer's responsibility to ensure that complies with all relevant legislations, regulations and prescription both in use of our products and subsequent application. All the data are based on our own tests and comparison between different pigments.





Presol Black 41

Technical Data Sheet

Version: 3.0.1 Rev. Date: 05/12 / 2022

| PRODUCT DESCRIPTION | |
|---------------------|-----------------|
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| C.I. No. | N/A |
| CAS No. | N/A |
| EC No. | N/A |
| Chemical Type | N/A |
| Chemical Formula | N/A |

| FULL SHADE | REDUCTION (1:10 TiO2) |
|------------|-----------------------|
| | |
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PRODUCT PROFILE

Presol Black 41 is a mixed black solvent dye with bluish shade. The advantage of this product is it gives a transparant, glossy, and strong black color that can be applied for many carriers. It has good tinting strength, excellent light fastness and heat fastness. It is applied to the coloring of styrenic engineering plastics. The performance of Presol Black 41 used in polyester fiber is excellent, including light fastness, wash fastness, rubbing fastness etc.

| STRUCTURAL FORMULA | | | | | | |
|--------------------|-----|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | N/A | | | | | |
| | | | | | | |
| | | | | | | |

| PHYSICAL DATA | |
|------------------------------|-------------|
| Appearance | Dark Powder |
| Density [g/cm ³] | 1.35 |
| Bulk Volume [kg/m³] | 300 |

| APPLICATION PROFILE | | | | | |
|---------------------|----|----------------|---|-----------------|-------|
| PS | • | SB | • | ABS | • |
| SAN | • | PMMA | • | PC | • |
| PVC-U | • | PPO | - | PET | • |
| POM | • | PA6/66 | Х | PBT | • |
| PES | - | | | | |
| • = recommende | ed | o= limited use | | x = not recomme | ended |

| FASTNESS PROPERTIES | | |
|-----------------------------------|-----|--|
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| Light Fastness [1/3 SD] [PS] | 7~8 | |
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Material Test and Evaluation Report

Report No.: NBSC10090

Report Date: Aug. 28, 2022

Material Classification

| | Pigment | Resin |
|--------------|-------------|----------|
| \checkmark | Solvent Dye | Additive |

Material Info.

| Product Name | Presol Black 38 | Lot. No. | 220818 | |
|--------------|-----------------|----------|--------|--|
|--------------|-----------------|----------|--------|--|

Color Evaluation

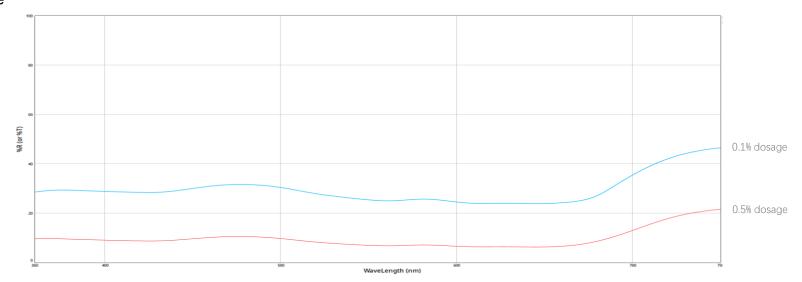
| Product Name | Dosage % Fiber Specification | | Resin | Туре | L | a | b | С | h |
|-----------------|------------------------------|----------|------------|---------------|-------|-------|-------|------|--------|
| Presol Black 38 | 0.1 | 300D/96f | RPET-006A1 | Filament yarn | 58.62 | -2.73 | -5.30 | 5.96 | 242.74 |
| Presol Black 38 | 0.5 | 300D/96f | RPET-006A1 | Filament yarn | 33.38 | -2.90 | -6.72 | 7.32 | 246.64 |







Reflection Curve







Fastness Evaluation

| | | | Standard | | | Sample | | | Color Shade | | | | CC | CC |
|-----------------|--------------|--------|----------|-------|-------|--------|-------|-------|-------------|---------|---------|------|----------------|-------------|
| Program | Туре | Dosage | L* | a* | b* | L* | a* | b* | DL* | Da* | Db* | DE* | GS Variance | GS Stain |
| Rubbing | Stain | 0.10% | 94.51 | 0.01 | 3.2 | 94.24 | 0.04 | 3.15 | -0.27 D | 0.03 R | -0.05 B | 0.28 | | 5 |
| ISO 105-X12 | 105-X12 | 0.50% | 94.51 | 0.01 | 3.2 | 94.09 | 0.03 | 3.25 | -0.42 D | 0.02 | 0.05 Y | 0.42 | | 5 |
| | 150℃ | 0.10% | 52.05 | -2.6 | -5.15 | 52.67 | -2.42 | -5.11 | 0.62 L | 0.17 R | 0.04 Y | 0.65 | 4.5 | \ |
| | Variance | 0.50% | 29.78 | -2.56 | -6.18 | 30 | -2.44 | -6.21 | 0.22 L | 0.13 R | -0.02 B | 0.25 | 5 | \ |
| | 180°C | 0.10% | 52.05 | -2.6 | -5.15 | 52.98 | -2.46 | -5.19 | 0.92 L | 0.14 R | -0.04 B | 0.94 | 4.5 | \ |
| | Variance | 0.50% | 29.78 | -2.56 | -6.18 | 30.78 | -2.41 | -6.11 | 1.00 L | 0.16 R | 0.08 Y | 1.01 | 4.5 | \ |
| | 210℃ | 0.10% | 52.05 | -2.6 | -5.15 | 53.11 | -2.41 | -4.98 | 1.05 L | 0.19 R | 0.17 Y | 1.08 | 4.5 | \ |
| Hot Pressing | Variance | 0.50% | 29.78 | -2.56 | -6.18 | 30.66 | -2.42 | -6.1 | 0.88 L | 0.14 R | 0.08 Y | 0.89 | 4.5 | \ |
| ISO 105-P01 | 150℃ | 0.10% | 95.15 | -0.43 | 1.14 | 94.07 | -0.53 | 1.66 | -1.08 D | -0.11 G | 0.52 Y | 1.2 | | 5 |
| | Stain | 0.50% | 95.15 | -0.43 | 1.14 | 93.86 | -0.57 | 1.5 | -1.29 D | -0.15 G | 0.36 Y | 1.35 | | 4.5 |
| | 180℃ | 0.10% | 95.15 | -0.43 | 1.14 | 93.58 | -0.62 | 1.59 | -1.57 D | -0.19 G | 0.46 Y | 1.65 | | 4.5 |
| | Stain | 0.50% | 95.15 | -0.43 | 1.14 | 90.28 | -1.44 | -1.11 | -4.87 D | -1.02 G | -2.25 B | 5.46 | | 4 |
| | 210℃ | 0.10% | 95.15 | -0.43 | 1.14 | 91.6 | -1.15 | 0.19 | -3.55 D | -0.73 G | -0.95 B | 3.75 | | 4 |
| | Stain | 0.50% | 95.15 | -0.43 | 1.14 | 87.06 | -1.82 | -3.91 | -8.09 D | -1.39 G | -5.05 B | 9.64 | | 3 |
| | Mariana | 0.10% | 52.05 | -2.6 | -5.15 | 51.23 | -2.49 | -4.97 | -0.82 D | 0.10 R | 0.19 Y | 0.85 | 4.5 | \ |
| Charmina | Variance | 0.50% | 29.78 | -2.56 | -6.18 | 29.9 | -2.49 | -5.8 | 0.11 L | 0.08 R | 0.38 Y | 0.41 | 5 | \ |
| Steaming | Chain | 0.10% | 95.15 | -0.43 | 1.14 | 93.07 | -0.3 | 1.46 | -2.08 D | 0.12 R | 0.32 Y | 2.11 | | 4.5 |
| | Stain | 0.50% | 95.15 | -0.43 | 1.14 | 88.13 | -1.32 | -0.2 | -7.03 D | -0.90 G | -1.34 B | 7.21 | | 3.5 |
| | Variance | 0.10% | 52.05 | -2.6 | -5.15 | 50.77 | -2.46 | -4.6 | -1.28 D | 0.13 R | 0.55 Y | 1.4 | 4 | |
| Soaping 60°C | | 0.50% | 29.78 | -2.56 | -6.18 | 28.91 | -2.51 | -5.65 | -0.87 D | 0.06 R | 0.53 Y | 1.02 | 4.5 | \ |
| ISO 105-C06 C2S | 2S PET Stain | 0.10% | 94.4 | -0.32 | 2.1 | 91.89 | -0.61 | 1.55 | -2.51 D | -0.30 G | -0.55 B | 2.59 | | 4.5 |
| | | 0.50% | 94.4 | -0.32 | 2.1 | 92.45 | -0.23 | 2.06 | -1.95 D | 0.09 R | -0.04 B | 1.96 | | 4.5 |





Conclusion

Based on the fastness test of Presol Black 38, it is found that the fastness of this dye is excellent, and its dispersibility can be further investigated according to different application requirements, so as to find the suitable application field.