

## TECHNICAL DATA SHEET

PURAL PES 5L2310153T000 (EX 5023A1015) IVORY SM HG TS

X R1015 - QUALICOAT P-0238

### Composition

Powder based on polyester carboxylated saturated resins and hardeners alternative to TGIC chosen for their characteristics of outdoor resistance. Formulated with pigments and additives specifically selected for the high resistance to UV rays and weathering agents

### Recommended uses

Powder dedicated to outdoor exposition where expresses its remarkable qualities of resistance to chalking and color variation at the best. It is indicated for coating of aluminium and iron windows in building, lighting elements, bodies for agricultural and industrial machinery.

In order to obtain a good protection, it is necessary to spray an average thickness of 70- 80 micron.

### Substrate pre-treatment

Powders adhere to most metal surfaces provided these are dry, clean and degreased. A chemical pre-treatment of the surface is required in order to improve the resistance against the corrosion, based on the kind of metallic support.

### Application

This powder is suitable for use with electrostatic spraying equipments whose voltage is between 40 and 90 KV. Where acronym "TS" is present, our products are working also with triboelectrical guns.

A difference of thickness of applied coating can generate modification of the appearance of hardened coating. In case of products having special effects, the use of overspray is not advised except for bonded products.

### Polymerization conditions

180°C x 20', 190°C x 15', 200°C x 10' (piece temperature)

### Characteristics after polymerization (application on steel panel)

|                    |               |            |
|--------------------|---------------|------------|
| Erichsen Drawing:  | >= 5 mm       | ISO 1520   |
| Mandrel Bend Test: | >= 4 mm       | ISO 1519   |
| Impact Resistance: | >= 2,5 Nm     | ASTM D2794 |
| Buchholz Hardness: | >=80          | ISO 2815   |
| Cross Cut Test:    | Gt0           | ISO 2409   |
| Gloss 60°:         | 60 - 80 gloss | ISO 2813   |

### Chemical resistance

The product has good resistance to most 10% acids and to ethylalcohol at room temperature (25°C). For specific requests we invite you to contact our technical assistance.

### Corrosion resistance (application on iron-phosphate bonder)

|                   |                                      |          |
|-------------------|--------------------------------------|----------|
| Humidity Chamber: | After 500 hours no change.           | ISO 6270 |
| Kesternich:       | After 10 cycles no loss of adhesion. | ISO 3231 |
| Salt Spray:       | After 1000 hours < 1 mm penetration. | ISO 9227 |

### Accelerated ageing (QUV-B) (313 nm) with QUV/SE cycle 4 hours, condensation at 40°C/4 h irradiation 50°C (0,75 W/m<sup>2</sup>/nm. Application on aluminium panel)

|       |                                   |
|-------|-----------------------------------|
| Test: | After 300 hours loss gloss <=50%. |
|-------|-----------------------------------|

### Storage

The product is guaranteed for 24 months since production date whether stored in a temperature not over 30°C and in the original packaging.

### Notes:

- \* The above data are the results of careful researches and our long experience, nevertheless considering the large number of factors concurring to determine the values in the present technical data sheet, the utilizer will have the duty to effect the best conditions so as to get the best result.
- \* This product is destined only to professional applicators working in an industrial installation. The manipulation of the product from the utilizer must be conform to laws concerning the use of powder coatings and to information described in our technical data sheet sent together with the product itself.

Revision 3/June. 2019

EUROPOLVERI S.p.A.

## TECHNICAL DATA SHEET

PURAL PES 5L2660113T000 (EX 5026A6011) GREEN SM HG TS

X R6011 - QUALICOAT P-0238

### Composition

Powder based on polyester carboxylated saturated resins and hardeners alternative to TGIC chosen for their characteristics of outdoor resistance. Formulated with pigments and additives specifically selected for the high resistance to UV rays and weathering agents

### Recommended uses

Powder dedicated to outdoor exposition where expresses its remarkable qualities of resistance to chalking and color variation at the best. It is indicated for coating of aluminium and iron windows in building, lighting elements, bodies for agricultural and industrial machinery. In order to obtain a good protection, it is necessary to spray an average thickness of 70- 80 micron.

### Substrate pre-treatment

Powders adhere to most metal surfaces provided these are dry, clean and degreased. A chemical pre-treatment of the surface is required in order to improve the resistance against the corrosion, based on the kind of metallic support.

### Application

This powder is suitable for use with electrostatic spraying equipments whose voltage is between 40 and 90 KV. Where acronym "TS" is present, our products are working also with triboelectrical guns. A difference of thickness of applied coating can generate modification of the appearance of hardened coating. In case of products having special effects, the use of overspray is not advised except for bonded products.

### Polymerization conditions

180°C x 20', 190°C x 15', 200°C x 10' (piece temperature)

### Characteristics after polymerization (application on steel panel)

|                    |               |            |
|--------------------|---------------|------------|
| Erichsen Drawing:  | >= 5 mm       | ISO 1520   |
| Mandrel Bend Test: | >= 4 mm       | ISO 1519   |
| Impact Resistance: | >= 2,5 Nm     | ASTM D2794 |
| Buchholz Hardness: | >=80          | ISO 2815   |
| Cross Cut Test:    | Gt0           | ISO 2409   |
| Gloss 60°:         | 60 - 80 gloss | ISO 2813   |

### Chemical resistance

The product has good resistance to most 10% acids and to ethylalcohol at room temperature (25°C). For specific requests we invite you to contact our technical assistance.

### Corrosion resistance (application on iron-phosphate bonder)

|                   |                                      |          |
|-------------------|--------------------------------------|----------|
| Humidity Chamber: | After 500 hours no change.           | ISO 6270 |
| Kesternich:       | After 10 cycles no loss of adhesion. | ISO 3231 |
| Salt Spray:       | After 1000 hours < 1 mm penetration. | ISO 9227 |

### Accelerated ageing (QUV-B) (313 nm) with QUV/SE cycle 4 hours, condensation at 40°C/4 h irradiation 50°C (0,75 W/m<sup>2</sup>/nm. Application on aluminium panel)

|       |                                   |
|-------|-----------------------------------|
| Test: | After 300 hours loss gloss <=50%. |
|-------|-----------------------------------|

### Storage

The product is guaranteed for 24 months since production date whether stored in a temperature not over 30°C and in the original packaging.

### Notes:

- \* The above data are the results of careful researches and our long experience, nevertheless considering the large number of factors concurring to determine the values in the present technical data sheet, the utilizer will have the duty to effect the best conditions so as to get the best result.
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Revision 3/June. 2019

EUROPOLVERI S.p.A.

## TECHNICAL DATA SHEET

PURAL PES 5L2661183T000 (EX 5026A6018) GREEN SM HG TS

X 6018CA. - QUALICOAT P-0238

### Composition

Powder based on polyester carboxylated saturated resins and hardeners alternative to TGIC chosen for their characteristics of outdoor resistance. Formulated with pigments and additives specifically selected for the high resistance to UV rays and weathering agents

### Recommended uses

Powder dedicated to outdoor exposition where expresses its remarkable qualities of resistance to chalking and color variation at the best. It is indicated for coating of aluminium and iron windows in building, lighting elements, bodies for agricultural and industrial machinery.

In order to obtain a good protection, it is necessary to spray an average thickness of 70- 80 micron.

### Substrate pre-treatment

Powders adhere to most metal surfaces provided these are dry, clean and degreased. A chemical pre-treatment of the surface is required in order to improve the resistance against the corrosion, based on the kind of metallic support.

### Application

This powder is suitable for use with electrostatic spraying equipments whose voltage is between 40 and 90 KV. Where acronym "TS" is present, our products are working also with triboelectrical guns.

A difference of thickness of applied coating can generate modification of the appearance of hardened coating. In case of products having special effects, the use of overspray is not advised except for bonded products.

### Polymerization conditions

180°C x 20', 190°C x 15', 200°C x 10' (piece temperature)

### Characteristics after polymerization (application on steel panel)

|                    |               |            |
|--------------------|---------------|------------|
| Erichsen Drawing:  | >= 5 mm       | ISO 1520   |
| Mandrel Bend Test: | >= 4 mm       | ISO 1519   |
| Impact Resistance: | >= 2,5 Nm     | ASTM D2794 |
| Buchholz Hardness: | >=80          | ISO 2815   |
| Cross Cut Test:    | Gt0           | ISO 2409   |
| Gloss 60°:         | 60 - 80 gloss | ISO 2813   |

### Chemical resistance

The product has good resistance to most 10% acids and to ethylalcohol at room temperature (25°C). For specific requests we invite you to contact our technical assistance.

### Corrosion resistance (application on iron-phosphate bonder)

|                   |                                      |          |
|-------------------|--------------------------------------|----------|
| Humidity Chamber: | After 500 hours no change.           | ISO 6270 |
| Kesternich:       | After 10 cycles no loss of adhesion. | ISO 3231 |
| Salt Spray:       | After 1000 hours < 1 mm penetration. | ISO 9227 |

### Accelerated ageing (QUV-B) (313 nm) with QUV/SE cycle 4 hours, condensation at 40°C/4 h irradiation 50°C (0,75 W/m<sup>2</sup>/nm. Application on aluminium panel)

|       |                                   |
|-------|-----------------------------------|
| Test: | After 300 hours loss gloss <=50%. |
|-------|-----------------------------------|

### Storage

The product is guaranteed for 24 months since production date whether stored in a temperature not over 30°C and in the original packaging.

### Notes:

- \* The above data are the results of careful researches and our long experience, nevertheless considering the large number of factors concurring to determine the values in the present technical data sheet, the utilizer will have the duty to effect the best conditions so as to get the best result.
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EUROPOLVERI S.p.A.

## TECHNICAL DATA SHEET

PURAL PES 5L2750033T000 (EX 5027A5003) BLUE SM HG TS

X R5003 - QUALICOAT P-0238

### Composition

Powder based on polyester carboxylated saturated resins and hardeners alternative to TGIC chosen for their characteristics of outdoor resistance. Formulated with pigments and additives specifically selected for the high resistance to UV rays and weathering agents

### Recommended uses

Powder dedicated to outdoor exposition where expresses its remarkable qualities of resistance to chalking and color variation at the best. It is indicated for coating of aluminium and iron windows in building, lighting elements, bodies for agricultural and industrial machinery.

In order to obtain a good protection, it is necessary to spray an average thickness of 70- 80 micron.

### Substrate pre-treatment

Powders adhere to most metal surfaces provided these are dry, clean and degreased. A chemical pre-treatment of the surface is required in order to improve the resistance against the corrosion, based on the kind of metallic support.

### Application

This powder is suitable for use with electrostatic spraying equipments whose voltage is between 40 and 90 KV. Where acronym "TS" is present, our products are working also with triboelectrical guns.

A difference of thickness of applied coating can generate modification of the appearance of hardened coating. In case of products having special effects, the use of overspray is not advised except for bonded products.

### Polymerization conditions

180°C x 20', 190°C x 15', 200°C x 10' (piece temperature)

### Characteristics after polymerization (application on steel panel)

|                    |               |            |
|--------------------|---------------|------------|
| Erichsen Drawing:  | >= 5 mm       | ISO 1520   |
| Mandrel Bend Test: | >= 4 mm       | ISO 1519   |
| Impact Resistance: | >= 2,5 Nm     | ASTM D2794 |
| Buchholz Hardness: | >=80          | ISO 2815   |
| Cross Cut Test:    | Gt0           | ISO 2409   |
| Gloss 60°:         | 60 - 80 gloss | ISO 2813   |

### Chemical resistance

The product has good resistance to most 10% acids and to ethylalcohol at room temperature (25°C). For specific requests we invite you to contact our technical assistance.

### Corrosion resistance (application on iron-phosphate bonder)

|                   |                                      |          |
|-------------------|--------------------------------------|----------|
| Humidity Chamber: | After 500 hours no change.           | ISO 6270 |
| Kesternich:       | After 10 cycles no loss of adhesion. | ISO 3231 |
| Salt Spray:       | After 1000 hours < 1 mm penetration. | ISO 9227 |

### Accelerated ageing (QUV-B) (313 nm) with QUV/SE cycle 4 hours, condensation at 40°C/4 h irradiation 50°C (0,75 W/m<sup>2</sup>/nm. Application on aluminium panel)

|       |                                   |
|-------|-----------------------------------|
| Test: | After 300 hours loss gloss <=50%. |
|-------|-----------------------------------|

### Storage

The product is guaranteed for 24 months since production date whether stored in a temperature not over 30°C and in the original packaging.

### Notes:

- \* The above data are the results of careful researches and our long experience, nevertheless considering the large number of factors concurring to determine the values in the present technical data sheet, the utilizer will have the duty to effect the best conditions so as to get the best result.
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Revision 3/June. 2019

EUROPOLVERI S.p.A.

## TECHNICAL DATA SHEET

PURAL PES 5L2870333T000 (EX 5028A7033) GREY SM HG TS

X R7033 - QUALICOAT P-0238

### Composition

Powder based on polyester carboxylated saturated resins and hardeners alternative to TGIC chosen for their characteristics of outdoor resistance. Formulated with pigments and additives specifically selected for the high resistance to UV rays and weathering agents

### Recommended uses

Powder dedicated to outdoor exposition where expresses its remarkable qualities of resistance to chalking and color variation at the best. It is indicated for coating of aluminium and iron windows in building, lighting elements, bodies for agricultural and industrial machinery. In order to obtain a good protection, it is necessary to spray an average thickness of 70- 80 micron.

### Substrate pre-treatment

Powders adhere to most metal surfaces provided these are dry, clean and degreased. A chemical pre-treatment of the surface is required in order to improve the resistance against the corrosion, based on the kind of metallic support.

### Application

This powder is suitable for use with electrostatic spraying equipments whose voltage is between 40 and 90 KV. Where acronym "TS" is present, our products are working also with triboelectrical guns. A difference of thickness of applied coating can generate modification of the appearance of hardened coating. In case of products having special effects, the use of overspray is not advised except for bonded products.

### Polymerization conditions

180°C x 20', 190°C x 15', 200°C x 10' (piece temperature)

### Characteristics after polymerization (application on steel panel)

|                    |               |            |
|--------------------|---------------|------------|
| Erichsen Drawing:  | >= 5 mm       | ISO 1520   |
| Mandrel Bend Test: | >= 4 mm       | ISO 1519   |
| Impact Resistance: | >= 2,5 Nm     | ASTM D2794 |
| Buchholz Hardness: | >=80          | ISO 2815   |
| Cross Cut Test:    | Gt0           | ISO 2409   |
| Gloss 60°:         | 60 - 80 gloss | ISO 2813   |

### Chemical resistance

The product has good resistance to most 10% acids and to ethylalcohol at room temperature (25°C). For specific requests we invite you to contact our technical assistance.

### Corrosion resistance (application on iron-phosphate bonder)

|                   |                                      |          |
|-------------------|--------------------------------------|----------|
| Humidity Chamber: | After 500 hours no change.           | ISO 6270 |
| Kesternich:       | After 10 cycles no loss of adhesion. | ISO 3231 |
| Salt Spray:       | After 1000 hours < 1 mm penetration. | ISO 9227 |

### Accelerated ageing (QUV-B) (313 nm) with QUV/SE cycle 4 hours, condensation at 40°C/4 h irradiation 50°C (0,75 W/m<sup>2</sup>/nm. Application on aluminium panel)

|       |                                   |
|-------|-----------------------------------|
| Test: | After 300 hours loss gloss <=50%. |
|-------|-----------------------------------|

### Storage

The product is guaranteed for 24 months since production date whether stored in a temperature not over 30°C and in the original packaging.

### Notes:

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