## Date: $21^{\text {st }}$ October 2021 <br> Technical Data Sheet

| Product Name |  |
| :--- | :--- |
| Full Product Name | 2K Empress Black |
| Type of Product | 2K acrylic urethane topcoat |
| Description | Concept 2K Empress Black is a high performance 2K <br> black topcoat. It is formulated to match the intensely jet- <br> black paint colour used on a number of OEM vehicles. It <br> is characterized by its excellent flow, producing high <br> gloss, high opacity with excellent chemical resistance <br> and durability. |


| Products |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Product Name | Volume <br> Solids <br> $\%$ | Weight <br> Solids <br> $\%$ | Density <br> $\mathrm{g} / \mathrm{mL}$ <br> lbs/US gal | VOC <br> $\mathrm{g} / \mathrm{L}$ <br> lbs/US gal |  |  |
| 2K Empress Black | 26.6 | 32.2 | 0.965 | 8.05 | 656.0 | 5.47 |
| MS Uni Hardener Slow | 35.4 | 40.9 | 1.004 | 8.38 | 593.8 | 4.96 |
| MS Uni Hardener Normal | 33.3 | 39.9 | 0.986 | 8.23 | 593.1 | 4.95 |
| MS Uni Hardener Fast | 33.6 | 40.2 | 0.968 | 8.08 | 578.3 | 4.83 |
| MS Uni Hardener Super Fast | 31.5 | 38.9 | 0.938 | 7.83 | 572.7 | 4.78 |
| 2K Thinner Slow | 0.0 | 0.0 | 0.893 | 7.45 | 892.7 | 7.45 |
| 2K Thinner | 0.0 | 0.0 | 0.882 | 7.36 | 881.9 | 7.36 |
| 2K Thinner Fast | 0.0 | 0.0 | 0.872 | 7.27 | 871.5 | 7.27 |

## Properties

- High performance, opacity and jetness of colour
- Fast drying
- Excellent through cure
- Excellent levelling and flow
- High gloss


## Technical Data Sheet

## Substrates

- Concept HS 2K Primer
- Sound existing surfaces, except for unstable surfaces such as nitrocellulose or enamels.

| Substrate Preparation |  |
| :--- | :--- |
| Gill | All Substrates | | All surfaces must be thoroughly sanded and cleaned with |
| :--- |
| Concept Wax \& Grease Remover prior to application. |


| Product Preparation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ | Mixing Ratio 2:1 (by volume) | Concept <br> 2K Empress Black |  | Concept MS Uni Hardener |  |
|  |  | 2 parts |  | 1 part |  |
| $\hat{y}$ | Reducer | Up to $10 \%(\mathrm{v} / \mathrm{v})$ of Concept 2K Thinner, if required. |  |  |  |
|  | Pot life <br> @ $\mathbf{2 5}{ }^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$ | 2-3 hours |  |  |  |
| 万浐 | Spray viscosity @ $25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$ | BSB 4 Cup Ford 4 Cup | $\begin{aligned} & 16-17 \mathrm{~s} \\ & 14-15 \mathrm{~s} \end{aligned}$ |  |  |
|  | Spray equipment | Gun type | Fluid tip | Spray pressure | Spray Distance |
|  |  | Gravity feed | $\begin{aligned} & 1.3-1.4 \mathrm{~mm} \\ & 0.051-0.055 " \end{aligned}$ | $\begin{gathered} 200-240 \mathrm{kPa} \\ 2.0-2.4 \mathrm{bar} \\ 30-35 \mathrm{psi} \end{gathered}$ | $\begin{aligned} & 15-20 \mathrm{~cm} \\ & 6-8 \text { inch } \end{aligned}$ |
|  |  | Suction feed | $\begin{aligned} & 1.3-1.4 \mathrm{~mm} \\ & 0.051-0.055 " \end{aligned}$ | $\begin{gathered} 200-240 \mathrm{kPa} \\ 2.0-2.4 \mathrm{bar} \\ 30-35 \mathrm{psi} \\ \hline \end{gathered}$ | $\begin{aligned} & 15-20 \mathrm{~cm} \\ & 6-8 \text { inch } \end{aligned}$ |
| HVLP |  | HVLP | $\begin{aligned} & 1.2-1.3 \mathrm{~mm} \\ & 0.047-0.051 " \end{aligned}$ | $\begin{gathered} \hline 40-70 \mathrm{kPa} \\ 0.4-0.7 \mathrm{bar} \\ 6-10 \mathrm{psi} \\ \hline \end{gathered}$ | $\begin{aligned} & 15-20 \mathrm{~cm} \\ & 6-8 \text { inch } \end{aligned}$ |
|  | Number of coats | 2-3 | Apply one coat followed by one or two even full coats. Avoid heavy wet coats. |  |  |

## Technical Data Sheet

## Product Preparation cont

| $\underset{\leftrightarrows}{\leftrightarrows}$ | DFT <br> Recommended | $\begin{aligned} & 40-50 \mu \mathrm{~m} \\ & 1.6-2.0 \text { mils } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| $\uparrow \uparrow \uparrow\rangle$ | Flash off time @ $25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$ | 5-10 min between coats |  |
|  | Drying | Air Dry <br> @ $25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$ | 16-24 hours |
|  |  | Low Bake @ $50^{\circ} \mathrm{C}\left(122^{\circ} \mathrm{F}\right)$ | 30-40 min |

This data relates only to the material designated herein and does not apply to use in combination with any other material or any process. The data is not to be considered as a warranty or quality specification and we assume no liability in connection with its use.

## Remarks

| 4 <br> 7 <br> 1 | Stir all products thoroughly each time before use. Stir the mixture well after the weigh-out of the components. |
| :---: | :---: |
| $\overline{E^{[F F / C C}}$ | Surface temperature must always be a minimum of $3^{\circ} \mathrm{C}$ $\left(5^{\circ} \mathrm{F}\right)$ above dew point. |

## Equipment Cleaning

Use recommended Concept Paints 035 Gunwash

| Dry Film Properties | After 7 days drying, <br> when compared to similar technology products. |
| :--- | :--- |
| Gloss | Ecellent |
| Chemical resistance | Excellent |
| Durability | Excellent |


| Product Data |  |  |
| :--- | :--- | :---: |
| Colour | Black |  |
| Theoretical Coverage | Approx. $9.0 \mathrm{~m}^{2} / \mathrm{L}\left(365 \mathrm{ft}^{2} / \mathrm{US}\right.$ gal) @ recommended DFT |  |
| Shelf Life | 36 months in an unopened container at room <br> temperature, away from sunlight. |  |


| Product Packaging |  |  |
| :--- | :--- | :--- |
| Product Code | Product Name | Package Size |
| AU41070030001 | 2K Empress Black | 1 L |
| AU2139100000X | MS Uni Hardener Slow | $500 \mathrm{~mL}, 1 \mathrm{~L}$ |
| AU2139200000X | MS Uni Hardener Normal | $500 \mathrm{~mL}, 1 \mathrm{~L}$ |
| AU2139300000X | MS Uni Hardener Fast | $500 \mathrm{~mL}, 1 \mathrm{~L}$ |
| AU2139400000X | MS Uni Hardener Super Fast | $500 \mathrm{~mL}, 1 \mathrm{~L}$ |
| AU8319100000X | 2K Thinner Slow | $4 \mathrm{~L}, 20 \mathrm{~L}$ |
| AU8319200000X | 2K Thinner | $1 \mathrm{~L}, 4 \mathrm{~L}, 20 \mathrm{~L}$ |
| AU8319300000X | 2K Thinner Fast | 4L, 20L |

## Safety

For automotive and industrial use only by professional painters. Not recommended for sale to, or use by the general public. Before using, read and follow all label and Safety Data Sheet (SDS) precautions. If mixed with other components, the mixture will have hazards of all individual components.
Read and understand the Guidelines for the Safe Handling and Use of Isocyanate Containing Paints, including the use of approved respiratory protection and Personal Protective Equipment. Use only in a well-ventilated approved spray booth, according to local regulations.

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This Technical Data Sheet supersedes all previous issues.

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