

Date: 19th July, 2018

# **Technical Data Sheet**

Version: 02

Product Name				
Full Product Name	Unicote 304 2K PU			
Type of Product	2K fast drying acrylic urethane topcoat			
Description	Concept Unicote 304 2K PU is a 2K acrylic urethane topcoat, characterised by its durability, excellent flow and gloss. It is suitable for most industrial and commercial applications			

Tinters						
Product Name	Volume Solids %	Weight Solids %		<b>nsity</b> lbs/US gal	<b>VC</b> g/L lb	o <b>C</b> s/US gal
341 White	70.0	84.7	1.909	15.93	291.2	2.43
342 Yellow Ochre	63.5	79.0	1.689	14.10	354.6	2.96
343 Black	60.2	64.5	1.083	9.04	384.1	3.21
344 Bright Blue	52.6	53.8	1.163	9.71	537.5	4.49
345 Green Blue	56.7	61.4	1.088	9.08	419.8	3.50
346 Violet	53.9	54.4	1.122	9.36	512.0	4.27
347 Bright Red	58.1	64.4	1.141	9.52	406.8	3.40
348 Magenta	58.6	62.6	1.072	8.94	401.4	3.35
349 Bright Yellow	56.2	62.2	1.125	9.39	425.4	3.55
350 Mid Yellow	44.2	50.1	1.085	9.06	541.8	4.52
351 Scarlet	59.8	68.5	1.240	10.35	390.3	3.26
352 Green	55.6	59.5	1.234	10.30	500.3	4.18
353 Dark Red Oxide	61.6	76.9	1.612	13.46	372.6	3.11
354 Jet Black	53.1	56.7	1.053	8.78	455.5	3.80
355 Red	63.1	66.1	1.187	9.91	402.4	3.36
371 Reduced Yellow Ochre	62.5	68.7	1.161	9.69	363.9	3.04
372 Reduced Black	61.8	65.0	1.059	8.84	370.3	3.09
373 Reduced Green Blue	60.6	64.3	1.060	8.85	378.9	3.16
374 Reduced Scarlet	61.8	66.0	1.093	9.12	371.2	3.10
375 Reduced Green	60.8	63.8	1.092	9.11	395.5	3.30
381 Silver	41.4	54.4	1.171	9.78	533.7	4.45
382 Coarse Silver	42.5	51.4	1.116	9.31	541.4	4.52
399 Flattening Base	35.9	43.2	1.094	9.13	621.5	5.19

TDS S04 Unicote 304 2K PU page 1 of 6



Date: 19th July, 2018

### **Technical Data Sheet**

Version: 02

Products	1					
Product Name	Volume Solids %	Weight Solids %		<b>sity</b> bs/US gal	VC g/L lk	OC os/US gal
304 2K PU Base	43.8	48.9	0.992	8.27	506.9	4.23
241 PU Hardener (4:1) Normal 241 PU Hardener (4:1) Fast 241 PU Hardener (4:1) Slow	33.9 33.6 35.4	39.9 40.2 40.9	0.986 0.968 1.004	8.23 8.08 8.38	593.1 578.3 593.8	4.95 4.83 4.96
831 2K Thinner Slow 831 2K Thinner 831 2K Thinner Fast	0.0 0.0 0.0	0.0 0.0 0.0	0.893 0.882 0.872	7.45 7.36 7.27	892.7 881.9 871.5	7.45 7.36 7.27

#### **Properties**

- Superior performance
- High gloss
- Quick and easy application

#### **Substrates**

- Mild Steel
- Aluminium
- Galvanised Iron
- Glass Reinforced Plastics (GRP)
- Previously painted substrates in sound condition

TDS S04 Unicote 304 2K PU page 2 of 6



Date: 19th July, 2018 Technical Data Sheet

Version: 02

### **Substrate Preparation**

Mild Steel	<b>DTM:</b> Sand with 240 Frecut <b>Primer:</b> Optimal: Concept 2K HS Primer or Concept 2K  Epoxy Primer – Urethane, or Concept EP41 Epoxy Primer  Standard: Apply Concept 1K Etch Primer or Concept  Universal 4000 Primer  Sand with P600 wet or dry				
Aluminium	Optimal: Apply Concept 2K EP41 Epoxy Primer or Concept 2K Etch Primer with Concept 2K HS Primer Standard: Apply Concept 1K Etch Primer or Concept Metal Etch or Concept Universal 4000 Primer Sand with P600 wet or dry				
Galvanised Iron	Optimal: Apply Concept 2K EP41 Epoxy Primer, or Concept 2K Etch Primer with Concept 2K HS Primer Standard: Apply Concept 1K Etch Primer or Concept Metal Etch or Concept Universal 4000 Primer Sand with P600 wet or dry				
Glass Reinforced Plastics (GRP)	Optimal: Apply Concept 2K EP41 Epoxy Primer or Concept 2K HS Primer  Standard: Apply Concept 1K Etch Primer or Concept Universal 4000 Primer  Sand with P600 wet or dry				
Previously painted Surfaces (in soundcondition)	Sand with P600 wet or dry				

#### **Special Notes:**

- All surfaces must be thoroughly sanded and cleaned with Concept Wax & Grease Remover prior to application.
- Use white or light coloured primers under bright yellows, oranges and reds, if required.
- The above systems are examples only. For further information, please contact Concept Paints Technical Representative.

#### **Product Preparation**

		<ul> <li>Weigh the concentrates into the required base in accordance with the relevant colour formula.</li> <li>A maximum of only 10% reduced concentrates is allowed and a maximum of 35% for all concentrates, in total.</li> <li>Stir or shake for a minimum of 10 minutes</li> <li>Never leave the mixture stand for more than 30 minutes before mixing.</li> </ul>			
$\square$ : $\square$	Mixing Ratio 4:1 (by volume)		Concept 304 2K PU	Concept 4:1 Hardener	
	(0)		4 parts	1 part	
	Reducer	Up to 20% (v/v) Concept 2K Thinner, if required			

TDS S04 Unicote 304 2K PU page 3 of 6



Date: 19th July, 2018 Technical Data Sheet

Version: 02

### **Product Preparation cont**

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<u></u> :_	Matting (if required)	<ul> <li>Satin Finish: Add 30% of 399 Flattening Base.</li> <li>Matt Finish: Add 45% of 399 Flattening Base.</li> <li>Notes: Never add more than 50% of 399 Flattening Base.</li> <li>399 Flattening Base must be added before adding a hardener or thinner.</li> <li>The addition of 399 Flattening Base will reduce coverage.</li> </ul>				
A B	Pot life @ 25°C (77°F)	2-3 hours				
S	Spray viscosity @ 25°C (77°F)	BSB 4 Cup Ford 4 Cup	18-20 s 16-17 s			
	Spray equipment	Gun type	Fluid tip	Spray pressure	Spray Distance	
<b>&gt;1</b>   <b>1</b>		Gravity Feed	1.2-1.4 mm 0.047-0.055"	200-240 kPa 2.0-2.4 bar 30-35 psi	15-20 cm 6-8 inch	
7		Suction feed	1.5-2.0 mm 0.059-0.079"	200-240 kPa 2.0-2.4 bar 30-35 psi	15-20 cm 6-8 inch	
HVLP		HVLP	1.2-1.3 mm 0.047-0.051"	40-70 kPa 0.4-0.7 bar 6-10 psi	15-20 cm 6-8 inch	
00		Airless, Air Assisted, Electrostatic	Consult the manufacturer's instructions.			
	Number of coats	2-3	Apply one light coat followed by one or two even full coats. Avoid heavy wet coats.			
	DFT Recommended	50 μm 2.0 mils				
?†?†? !******	Flash off time @ 25°C (77°F)	5-10 min between coats (15-20 min for 304 2K PU)				
	Drying	Air Dry @ 25°C (77°F)				

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.

TDS S04 Unicote 304 2K PU page 4 of 6



Date: 19th July, 2018

## **Technical Data Sheet**

Version: 02

Remarks	
	Stir all products thoroughly each time before use. Stir the mixture well after the weigh-out of the components.
	Before application a colour comparison is recommended
°F/°C	Surface temperature must always be a minimum of 3°C (5°F) above dew point.

### **Equipment Cleaning**

Use recommended Concept Paints cleaner such as Concept Gunwash or Multi-Thinner

Dry Film Properties	After 7 days drying, when compared to similar technology products.
Gloss 60/20°	94/87
Water resistance	Excellent
Petrol resistance	Excellent
Durability	Excellent

Product Data	
Theoretical Coverage	Approx. 8.0 m <sup>2</sup> /L (325 ft <sup>2</sup> /US gal) @ recommended DFT
Shelf Life	36 months in an unopened container at room temperature, away from sunlight.

TDS S04 Unicote 304 2K PU page 5 of 6



Date: 19th July, 2018 Technical Data Sheet

Version: 02

Product Packaging			
Product Code 1	Product Code 2	Product Name	Package Size
G/341-G/355 G/381-G/382 G/371-G/375 G/399 G/304 A04C/4:1 A04C/4:1F A04C/4:1S A08C/2KTHS A08C/2KTHIN A08C/2KTHF	3410341-3410355 3410381-3410382 3410371-3410375 3410399 3410304 2539200 2539300 2539100 8319100 8319200 8319300	Tinters Metallic Tinters Reduced Tinters 399 Flattening Base 304 2K PU Base 241 PU Hardener (4:1) Normal 241 PU Hardener (4:1) Fast 241 PU Hardener (4:1) Slow 831 2K Thinner Slow 831 2K Thinner 831 2K Thinner Fast	1L, 4L 1L, 4L 1L, 4L 4L, 20L, 2.8L, 14L 250 mL, 1L 250 mL, 1L 1L 1L, 4L, 20L 1L, 4L, 20L 1L, 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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