

# Technical Data Sheet

<b>Product Name</b>	
Full Product Name	<b>Unicote 309 2K Epoxy Base</b>
Type of Product	2K epoxy polyamide topcoat
Description	Concept Unicote 309 2K Epoxy Base is a 2K epoxy topcoat, suitable for most industrial and commercial applications. It is characterised by excellent adhesion and anti-corrosive properties with high abrasion and solvent resistance.

<b>Tinters</b>		<b>Volume Solids %</b>	<b>Weight Solids %</b>	<b>Density</b> g/mL lbs/US gal		<b>VOC</b> g/L lbs/US gal	
<b>Product Name</b>							
341 White		70.0	84.7	1.909	15.93	291.2	2.43
342 Yellow Ochre		6345	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		61.0	643	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

<b>Products</b>		<b>Volume Solids %</b>	<b>Weight Solids %</b>	<b>Density</b> g/mL lbs/US gal		<b>VOC</b> g/L lbs/US gal
309 2K Epoxy Base		42.7	51.0	1.050	8.76	514.6 4.29
309 Epoxy Hardener		37.1	41.3	0.933	7.79	542.0 4.52
831 2K Thinner Slow		0.0	0.0	0.893	7.45	892.7 7.45
831 2K Thinner Normal		0.0	0.0	0.882	7.36	881.9 7.36
831 2K Thinner Fast		0.0	0.0	0.872	7.27	871.5 7.27

## Properties

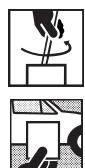
- Superior performance
- High gloss
- Quick and easy application
- Brush or roller application

## Substrates

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

<b>Substrate Preparation</b>	
	<b>Mild Steel</b>  <b>DTM:</b> Sand with 240 Frecut <b>Primer:</b> <u>Optimal:</u> Concept HS 2K Primer or Concept 136 Epoxy Urethane Primer or Concept 141 Epoxy Primer <b>Standard:</b> Apply Concept 103 Etch Primer or Concept 111 Universal Primer (HB) Sand with P600 wet or dry
<b>Aluminium</b>	<b>DTM:</b> No Sanding required <u>Optimal:</u> Apply Concept 141 Epoxy Primer or Concept 132 2K Etch Primer with Concept HS 2K Primer <b>Standard:</b> Apply Concept 103 Etch Primer or Concept 110 Metal Etch or Concept 111 Universal Primer (HB) Sand with P600 wet or dry
<b>Galvanised Iron</b>	<b>DTM:</b> Sand with 240 Frecut <u>Optimal:</u> Apply Concept 141 Epoxy Primer, or Concept 132 2K Etch Primer with Concept HS 2K Primer <b>Standard:</b> Apply Concept 103 Etch Primer or Concept 110 Metal Etch or Concept 111 Universal Primer (HB) Sand with P600 wet or dry
<b>Glass Reinforced Plastics (GRP)</b>	<b>DTM:</b> Sand with 240 Frecut <u>Optimal:</u> Apply Concept 141 Epoxy Primer or Concept HS 2K Primer <b>Standard:</b> Apply Concept 103 Etch Primer or Concept 111 Universal Primer (HB) Sand with P600 wet or dry
<b>Previously painted surfaces</b> (in sound condition)	Sand with P600 wet or dry
<b>Concrete Floors</b>	Dry sand with P400-P500 using an orbital sander for Painted Concrete if new concrete ensure surface is clean from any dust and impurities.
<b>Special Notes:</b> <ul style="list-style-type: none"><li>• All surfaces must be thoroughly sanded and cleaned with Concept Wax &amp; Grease Remover prior to application.</li><li>• Use white or light-coloured primers under bright yellows, oranges and reds, if required.</li><li>• The above systems are examples only. For further information, please contact Concept Paints Technical Representative.</li></ul>	

## Product Preparation



- Weigh the concentrates into the required base in accordance with the relevant colour formula.
- A maximum of only 10% reduced concentrates is allowed and a maximum of 35% for all concentrates, in total. **No thinning for painting Concrete floors**
- Stir or shake for a minimum of 10 minutes.
- Never leave the mixture stand for more than 30 minutes before mixing.



**4:1  
Mixing  
Ratio  
(by volume)**

**Concept  
309 2K Epoxy  
Base**

4 parts

**Concept  
309 Epoxy Hardener**

1 part

## Product Preparation



**Reducer**

Up to 20% (v/v) Concept 831 2K Thinner, if required



**Matting  
(if required)**

**Satin Finish:** Add 30% of 399 Flattening Base.

**Matt Finish:** Add 45% of 399 Flattening Base.

**Notes:**

- Never add more than 50% of 399 Flattening Base.
- 399 Flattening Base must be added before adding a hardener or thinner.
- The addition of 399 Flattening Base will reduce coverage.



**Pot life  
@ 25°C (77°F)**

3-4 hours



**Spray  
viscosity  
@ 25°C (77°F)**

**BSB 4 Cup  
Ford 4 Cup**

17-19 s  
15-17 s



**Spray  
equipment**

**Gun type**

**Fluid tip**

**Spray  
pressure**

**Spray  
Distance**

**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

# Technical Data Sheet

	<b>Suction feed</b>	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		
	<b>Airless, Air Assisted, Electrostatic</b>	Consult the manufacturer's instructions.				
	<b>Number of coats</b>	2-3	Apply one light coat followed by one or two even full coats. Avoid heavy wet coats. Two coats for Concrete floors if needed			
	<b>DFT Recommended</b>	80-100 µm 3.1-4.0 mils				
	<b>Flash off time @ 25°C (77°F)</b>	5-10 min between coats				
	<b>Drying</b>	<b>Air Dry @ 25°C (77°F)</b>	Tack Free: 3-4 hours Recoatable with itself after 7 hours minimum and 36 hours maximum.			
	<b>Application</b>		Using a brush or roller, apply one or two even coats. Avoid heavy wet coats.			
	<b>DFT Recommended</b>	20-25 µm 0.8-1.0 mil	Can be recoated after 16-20 hours at 25C.			
<p>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.</p>						

## 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
	Surface temperature must always be a minimum of 3°C (5°F) above dew point.

## Equipment Cleaning

Use Concept Paints cleaner such as Concept 035 Gunwash or 808 Multi-Thinner

<b>Dry Film Properties</b>	
	After 7 days drying, when compared to similar technology products.
<b>Gloss 60/20°</b>	95/85
<b>Water resistance</b>	Excellent
<b>Petrol resistance</b>	Excellent
<b>Abrasion Resistance</b>	Excellent
<b>Durability</b>	Good (will chalk and yellow on prolonged exposure)

## Product Data

<b>Theoretical Coverage</b>	Approx. 4.0 m <sup>2</sup> /L (165 ft <sup>2</sup> /US gal) @ recommended DFT
<b>Shelf Life</b>	36 months in an unopened container at room temperature away from sunlight. <b>309 Epoxy Hardener is 18 months only.</b>

## Product Packaging

Product Code	Product Name	Package Size
INXXXXXXXXXXXX	Unicote 300 Tinters	1L, 4L
INXXXXXXXXXXXX	Unicote 300 Metallic Tinters	1L, 4L
INXXXXXXXXXXXX	Unicote 300 Reduced Tinters	1L
IN3999003000X	399 Flattening Base	1L, 4L
IN3099000000X	309 2K Epoxy Base	4L, 14L, 20L
IN39092000001	309 Epoxy Hardener	1L
IN83191000020	831 2K Thinner Slow	20L
IN83192000020	831 2K Thinner Normal	20L
IN83193000020	831 2K Thinner Fast	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.

The information provided in this documentation has been carefully selected and arranged by us. It is based upon our best knowledge on the subject at the date of issuance. The Information is given for information purposes only. We are not liable for its correctness, accuracy and completeness. It is up to the user to check if the information is current, and the product is suitable for its intended purpose. The intellectual property in this Information, including patents, trademarks and copyrights, is protected. All rights reserved. We may modify and/ or discontinue operation of all or portions of this Information at any time in our sole discretion, without notice and assume no responsibility to update the Information. All rules set forth in this clause shall apply accordingly for any future changes and amendments. This Technical Data Sheet supersedes all previous issues.

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