

Technical Data Sheet

Edition dated: 25-11-2004

Data Sheet no: 2518

Lightfastness evaluation

Preliminary note

This lightfastness evaluation is valid for the following products:

- AVKOTE LE
- AVKOTE HR 5360
- AVKOTE KS 7450
- AVKOTE KS 7810

Evaluation

The test to measure the weathering values was carried out for the selected tones of AVKOTE LE by the South German Plastics Centre D-97082 in Wurzburg in accordance with RAL-GZ 716/1 quality standard, section 1, Part 6, Items. 2.13.

The evaluation was made following a radiation of 8 GJ/m². The evaluation is shown rated on the DIN 54 001 greyscale (Evaluation: 1 = very bad, 5 = very good).

Further tones were classified through analogy evaluation on the basis of the colour formulation. (Evaluation: 1 = very bad, 5 = very good).

RAL Tones

| RAL-nr. | Description | Value Grey- scale DIN 54001 | Evaluation analogy from Colour formulation |
|---------|-----------------|-----------------------------------|---|
| 1000 | Green-beige | - | approx. 4 |
| 1001 | Beige | - | approx. 4 |
| 1002 | Sand yellow | - | approx. 4 |
| 1003 | Signal yellow | - | 3 – 4 |
| 1004 | Golden yellow | - | 5 – 4 |
| 1005 | Honey-yellow | - | 5 – 4 |
| 1006 | Maize yellow | - | 4 – 3 |
| 1007 | Daffodil yellow | 4 – 3 | - |
| 1011 | Brown-beige | - | approx. 4 |
| 1012 | Lemon yellow | - | approx. 4 |
| 1013 | Oyster white | - | approx. 4 |

Greyscale Lightfastness Evaluation

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|------|-------------------|-------|-----------|
| 1014 | Ivory | - | approx. 4 |
| 1015 | Light ivory | 4 | - |
| 1016 | Sulphur yellow | - | 3 – 4 |
| 1017 | Saffron yellow | 3 – 2 | - |
| 1018 | Zinc yellow | - | 3 – 4 |
| 1019 | Grey-beige | - | approx. 4 |
| 1020 | Olive yellow | - | approx. 3 |
| 1021 | Rape yellow | 5 – 4 | - |
| 1023 | Traffic yellow | - | 5 – 4 |
| 1024 | Ochre yellow | - | Ca 4 |
| 1027 | Curry | - | 4 |
| 1028 | Melon yellow | - | 3 |
| 1032 | Broom yellow | - | 4 – 5 |
| 1033 | Dahlia yellow | - | 3 |
| 1034 | Pastel yellow | - | 3 |
| 1037 | Sun yellow | - | 3 – 4 |
| 2000 | Yellow orange | - | 3 – 2 |
| 2001 | Red orange | - | 2 |
| 2002 | Vermillion | - | 3 |
| 2003 | Pastel orange | 3 – 2 | - |
| 2004 | Pure orange | 3 | - |
| 2008 | Bright red orange | - | 3 |
| 2009 | Traffic orange | - | 3 |
| 2010 | Signal orange | - | 3 |
| 2011 | Deep orange | - | 3 – 2 |
| 2012 | Salmon orange | - | 1 – 2 |
| 2013 | Pearl orange | - | 3 |
| 3000 | Flame red | - | 4 |
| 3001 | Signal red | - | 4 |
| 3002 | Carmine red | - | 4 |
| 3003 | Ruby red | - | 4 |
| 3004 | Purple red | - | 4 |
| 3005 | Wine red | - | 4 |
| 3007 | Black red | - | 4 |
| 3009 | Oxide red | - | 4 |
| 3011 | Brown red | - | 4 |
| 3012 | Beige red | - | 4 – 3 |
| 3013 | Tomato red | - | 4 |
| 3014 | Antique pink | - | 1 |
| 3015 | Light pink | - | 1 |
| 3016 | Coral - red | - | 3 – 4 |
| 3017 | Rosé | 1 | - |
| 3018 | Strawberry red | - | 1 |
| 3020 | Traffic red | - | 4 |
| 3022 | Salmon pink | - | 1 |
| 3027 | Raspberry red | - | 2 |
| 3031 | Orient red | - | 2 |
| 3032 | Pearl ruby red | - | 3 |
| 4001 | Red-Lilac | - | 2 – 3 |

| | | | |
|------|------------------|-------|-------|
| 4002 | Red-Violet | 2 | - |
| 4003 | Heather Violet | 2 – 1 | - |
| 4004 | Claret Violet | - | 3 – 4 |
| 4005 | Blue - Lilac | - | 3 |
| 4006 | Traffic purple | - | 2 |
| 4007 | Purple-Violet | - | 3 – 4 |
| 4008 | Signal-Violet | - | 2 – 3 |
| 4009 | Pastel Violet | - | 1 – 2 |
| 4010 | Tele magenta | - | 1 |
| 4011 | Pearl-Violet | - | 3 |
| 4012 | Raspberry-pearl | - | 3 |
| 5000 | Violet blue | - | 4 |
| 5001 | Green blue | - | 4 |
| 5002 | Ultramarine blue | - | 4 |
| 5003 | Sapphire blue | - | 4 |
| 5004 | Black blue | 5 – 4 | - |
| 5005 | Signal blue | - | 4 |
| 5007 | Brilliant blue | - | 4* |
| 5008 | Grey blue | - | 4* |
| 5009 | Azure blue | - | 4* |
| 5010 | Gentian blue | - | 4* |
| 5011 | Steel blue | - | 5 – 4 |
| 5012 | Light blue | 4 | - |
| 5013 | Cobalt blue | - | 5 – 4 |
| 5014 | Pigeon blue | - | 4* |
| 5015 | Sky blue | - | 4* |
| 5017 | Traffic blue | - | 4* |
| 5018 | Turquoise blue | - | 5 – 4 |
| 5019 | Capri blue | - | 5 – 4 |
| 5020 | Ocean blue | - | 5 – 4 |
| 5021 | Water blue | - | 3 – 4 |
| 5022 | Night blue | - | 4 |
| 5023 | Distant blue | - | 3 – 4 |
| 5024 | Pastel blue | - | 4 |
| 5025 | Pearl gentian | - | 3 – 4 |
| | | | |
| 6000 | Patina green | - | 4 |
| 6001 | Emerald green | 4 | - |
| 6002 | Leaf green | - | 5 – 4 |
| 6003 | Olive green | - | 4 |
| 6004 | Blue green | - | 4 |
| 6005 | Moss green | - | 4 |
| 6006 | Grey olive | - | 4 |
| 6007 | Bottle-green | - | 4 |
| 6008 | Brown green | - | 4 |
| 6009 | Fir green | 4 | - |
| 6010 | Grass-green | - | 5 – 4 |
| 6011 | Reseda green | - | 4 |
| 6012 | Black green | - | 4 |

Greyscale Lightfastness Evaluation

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|------|------------------|-------|-------|
| 6013 | Reed Green | - | 4 |
| 6014 | Yellow olive | - | 4 – 3 |
| 6015 | Black olive | - | 4 |
| 6016 | Turquoise blue | - | 5 – 4 |
| 6017 | May green | - | 5 – 4 |
| 6018 | Yellow green | 5 – 4 | - |
| 6019 | Pastel green | - | 4 |
| 6020 | Chrome green | - | 4 |
| 6021 | Pale green | - | 4 |
| 6022 | Olive drab | - | 4 |
| 6024 | Traffic green | - | 4 |
| 6025 | Fern green | - | 4 |
| 6026 | Opal green | - | 5 – 4 |
| 6027 | Light green | - | 4 |
| 6028 | Pine green | - | 4 |
| 6029 | Mint green | - | 4 – 5 |
| 6032 | Signal green | - | 4 |
| 6033 | Mint turquoise | - | 3 |
| 6034 | Pastel turquoise | - | 3 |
| 6035 | Pearl green | - | 4 |
| 6036 | Pearl opal green | - | 4 |
| 7000 | Squirrel grey | - | 4 |
| 7001 | Silver grey | - | 4 – 3 |
| 7002 | Olive grey | - | 4 |
| 7003 | Moss grey | - | 4 |
| 7004 | Signal grey | - | 4 |
| 7005 | Mouse-grey | - | 4 |
| 7006 | Beige grey | - | 4 |
| 7008 | Khaki grey | - | 5 – 4 |
| 7009 | Green grey | - | 4 |
| 7010 | Tarpaulin grey | - | 4 |
| 7011 | Iron grey | 4 | - |
| 7012 | Basalt grey | - | 4 |
| 7013 | Brown grey | - | 4 |
| 7015 | Slate grey | - | 3 – 4 |
| 7016 | Anthracite grey | - | 4 |
| 7021 | Black grey | - | 4 |
| 7022 | Umber grey | - | 5 – 4 |
| 7023 | Concrete grey | - | 4 – 3 |
| 7024 | Graphite grey | - | 4 |
| 7026 | Granite grey | - | 4 |
| 7030 | Stone grey | - | 4 – 3 |
| 7031 | Blue grey | - | 4 |
| 7032 | Pebble-grey | - | 4 |
| 7033 | Cement grey | - | 4 |
| 7034 | Yellow grey | - | 4 – 3 |
| 7035 | Light grey | 4 – 3 | - |
| 7036 | Platinum grey | - | 4 |
| 7037 | Dust grey | - | 4 |

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|------|------------------|-------|-------|
| 7038 | Agate grey | - | 4 |
| 7039 | Quartz grey | - | 4 |
| 7040 | Window grey | - | 4 |
| 7042 | Traffic grey A | - | 4 – 3 |
| 7043 | Traffic grey B | - | 3 |
| 7044 | Silk grey | - | 4 |
| 7045 | Tele grey 1 | - | 3 |
| 7046 | Tele grey 2 | - | 4 – 3 |
| 7047 | Tele grey 4 | - | 4 – 3 |
| 7048 | Pearl-mouse-grey | - | 4 |
| 8000 | Green brown | - | 4 – 3 |
| 8001 | Ochre brown | - | 4 |
| 8002 | Signal brown | - | 4 – 3 |
| 8003 | Clay brown | - | 4 – 3 |
| 8004 | Copper brown | - | 4 – 3 |
| 8007 | Fawn-brown | - | 3 |
| 8008 | Olive brown | - | 5 |
| 8011 | Nut brown | - | 3 |
| 8012 | Red brown | 4 | - |
| 8014 | Sepia brown | 4 – 3 | - |
| 8015 | Chestnut brown | - | 4 |
| 8016 | Mahogany brown | - | 3 |
| 8017 | Choco. Brown | - | 3 |
| 8019 | Grey brown | - | 3 – 4 |
| 8022 | Black brown | - | 4 |
| 8023 | Orange brown | - | 3 |
| 8024 | Beige brown | - | 4 |
| 8025 | Pale brown | - | 3 |
| 8028 | Terra brown | - | 4 – 3 |
| 8029 | Pearl copper | - | 4 |
| 9001 | Cream | - | 5 – 4 |
| 9002 | Grey white | - | 4 |
| 9003 | Signal white | - | 4 – 5 |
| 9004 | Signal black | - | 5 |
| 9005 | Jet black | - | 4 |
| 9006 | White aluminium | - | 4* |
| 9007 | Grey aluminium | - | 4* |
| 9010 | Pure white | - | 5 – 4 |
| 9011 | Graphite black | - | 4 |
| 9016 | Traffic white | - | 4 |
| 9017 | Traffic black | - | 4 |
| 9018 | Papyrus White | - | 4 |
| 9022 | Pearl grey | - | 4 |
| 9023 | Pearl-Dark-Grey | - | 4 |

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| Important references |
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The lightfastness of AVKOTE LE/HR and/or AVKOTE KS is improved by approx. 2 points if AVKOTE Lacquer 1485 and/or AVKOTE clear coat coatings are applied.

For tones which are marked with "*" a clear coat is required.

For buildings situated near the sea a clearcoat must be applied to protect against the influences of salt air. Depending on the prevailing winds and climatic conditions, these maritime effects can stretch from 2 to 20 kms. In case of any doubt please contact our good selves, so we can clarify with our paint suppliers what is exactly needed to suit the application.