

**Attestation on testing a marking system on  
chromaticity co-ordinates, luminance factor  $\beta$  and resistance to chemicals  
for usage on manoeuvring areas**

<b>Attestation number: DSGS-02</b>	
<b>Applicant:</b>	SWARCO LIMBURGER LACKFABRIK GmbH Robert-Bosch-Straße 17, D - 65582 Diez
<b>Concern:</b>	Testing of BASt (Bundesanstalt für Straßenwesen, German Federal Highway Research Institute) tested marking systems on chromaticity co-ordinates, luminance factor $\beta$ and resistance to chemicals according to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018). The marking materials are being produced by the applicant.
<p>This is to attest that the BASt tested marking systems mentioned in the attachment below achieve the requirements regarding chromaticity co-ordinates, luminance factor <math>\beta</math> and resistance to chemicals according to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018).</p> <p>International requirements according to ICAO and EASA are also achieved (aside from the chromaticity co-ordinates for the colours Sky Blue and Grass Green). Supporting documents are available and can be ordered from the applicant or from DSGS if necessary.</p>	

Kassel, 02/11/2018, last changed at 24/04/2023



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This attestation includes one page plus an attachment of twenty-nine pages and may only be circulated or published unshortened.



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Deutsche Studiengesellschaft  
für Straßenmarkierungen e.V.

**Prüfdienst der Deutschen Studiengesellschaft für Straßenmarkierungen e. V.**

**Attachment**

The following marking systems with marking materials produced by SWARCO LIMBURGER LACKFABRIK GmbH are licensed under the attestation number DSGS-02 dated 24/04/2023:

**Table 1a** Water based paints non-reflective

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromatcity-coordinates and β-value	proof of resistance to chemicals	comments
1	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 9016 traffic white	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1)
2	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 1023 traffic yellow	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1)
3	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 2009 traffic orange	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1)
4	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 3020 traffic red	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1)
5	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 5015 sky blue	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1), 2)
6	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	blue according to ICAO	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8727	producer overview dated 30/03/2023	1), 2)
7	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 6010 grass green	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8608 D8706 D8727	producer overview dated 30/03/2023	1), 3)
8	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	green according to ICAO	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8727	producer overview dated 30/03/2023	1), 3)
9	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	300	RAL 9017 traffic black	2006 1DW 01.04 2013 1DW 07.14 2020 1DW 05.06 2020 1VW 05.07 2021 1VW 05.14	DSGS: D8706 D8727	producer overview dated 30/03/2023	1)

**Table 1a Water based paints non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromatometry-coordinates and β-value	proof of resistance to chemicals	comments
10	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 9016 traffic white	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8608, D8706	producer overview dated 30/03/2023	
11	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 1023 traffic yellow	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8608, D8706	producer overview dated 30/03/2023	
12	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 2009 traffic orange	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8608, D8706	producer overview dated 30/03/2023	
13	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 3020 traffic red	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8625, D8706	producer overview dated 30/03/2023	
14	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 5015 sky blue	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8608, D8706	producer overview dated 30/03/2023	2)
15	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	blue according to ICAO	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8727	producer overview dated 30/03/2023	2)
16	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 6010 grass green	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8608, D8706	producer overview dated 30/03/2023	3)
17	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	green according to ICAO	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8727	producer overview dated 30/03/2023	3)
18	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	400	RAL 9017 traffic black	2013 1DW 07.15 2018 1VW 06.16	DSGS; D8706	producer overview dated 30/03/2023	
19	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	600	RAL 9016 traffic white	97 1W 12.07 2021 1DW 05.16	DSGS; D8608, D8706, D8727	producer overview dated 30/03/2023	
20	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	600	RAL 1023 traffic yellow	97 1W 12.07 2021 1DW 05.16	DSGS; D8608, D8706, D8727	producer overview dated 30/03/2023	
21	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	600	RAL 2009 traffic orange	97 1W 12.07 2021 1DW 05.16	DSGS; D8608, D8706, D8727	producer overview dated 30/03/2023	
22	07/07/2016	water based paint	LIMBOROUTE LW48F Flugplatz		x	without	---	---	600	RAL 3020 traffic red	97 1W 12.07 2021 1DW 05.16	DSGS; D8608, D8706, D8727	producer overview dated 30/03/2023	



**Table 1a** Water based paints non-reflective (continued)

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
23	23/10/2015	water based paint	LIMBORROUTE LW48F Flugplatz		x	without	---	---	600	RAL 5015 sky blue	97 1W 12.07 2021 1DW 05.16	DSGS: D8608, D8706, D8727	producer overview dated 30/03/2023	2)
24	24/04/2023	water based paint	LIMBORROUTE LW48F Flugplatz		x	without	---	---	600	blue according to ICAO	97 1W 12.07 2021 1DW 05.16	DSGS: D8727	producer overview dated 30/03/2023	2)
25	23/10/2015	water based paint	LIMBORROUTE LW48F Flugplatz		x	without	---	---	600	RAL 6010 grass green	97 1W 12.07 2021 1DW 05.16	DSGS: D8608, D8706, D8727	producer overview dated 30/03/2023	3)
26	24/04/2023	water based paint	LIMBORROUTE LW48F Flugplatz		x	without	---	---	600	green according to ICAO	97 1W 12.07 2021 1DW 05.16	DSGS: D8727	producer overview dated 30/03/2023	3)
27	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz		x	without	---	---	600	RAL 9017 traffic black	97 1W 12.07 2021 1DW 05.16	DSGS: D8706, D8727	producer overview dated 30/03/2023	



**Table 1b Water based paints reflective type I**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast.-No.	proof of chromatific-coordinates and β-value	proof of resistance to chemicals	comments
28	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	SWARCOLUX P 21 T14 M25	SWARCO	300	RAL 9016 traffic white	2006 1DW 01.04	DSGS; D8608; D8706	producer overview dated 30/03/2023	
29	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	SWARCOFLEX 100 - 600 T14 M25	SWARCO	300	RAL 9016 traffic white	2013 1DW 07.14	DSGS; D8608; D8706	producer overview dated 30/03/2023	
30	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	300	RAL 9016 traffic white	2020 1DW 05.06	DSGS; D8706	producer overview dated 30/03/2023	
31	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 1023 traffic yellow	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1)
32	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 2009 traffic orange	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1)
33	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 3020 traffic red	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1)
34	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 5015 sky blue	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1), 4)
35	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	blue according to ICAO	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8727	producer overview dated 30/03/2023	1), 4)
36	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 6010 grass green	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1), 3)
37	24/04/2023	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	green according to ICAO	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8727	producer overview dated 30/03/2023	1), 3)
38	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 9017 traffic black	2020 1VW 05.07 2021 1VW 05.14	DSGS; D8706; D8727	producer overview dated 30/03/2023	1), 5)
39	23/10/2015	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	SWARCOFLEX 100 - 600 T14 M25	SWARCO	400	RAL 9016 traffic white	2013 1DW 07.15	DSGS; D8608; D8706	producer overview dated 30/03/2023	
40	04/06/2021	water based paint	LIMBOROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 1023 traffic yellow	2018 1VW 06.16	DSGS; D8706	producer overview dated 30/03/2023	

**Table 1b Water based paints reflective type I (continued)**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
41	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 2009 traffic orange	2018 1VW 06.16	DSGS: D8706	producer overview dated 30/03/2023	
42	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 3020 traffic red	2018 1VW 06.16	DSGS: D8706	producer overview dated 30/03/2023	
43	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 5015 sky blue	2018 1VW 06.16	DSGS: D8706	producer overview dated 30/03/2023	4)
44	24/04/2023	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	blue according to ICAO	2018 1VW 06.16	DSGS: D8727	producer overview dated 30/03/2023	4)
45	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 6010 grass green	2018 1VW 06.16	DSGS: D8706	producer overview dated 30/03/2023	3)
46	24/04/2023	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	green according to ICAO	2018 1VW 06.16	DSGS: D8727	producer overview dated 30/03/2023	3)
47	04/06/2021	water based paint	LIMBORROUTE LW48F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 9017 traffic black	2018 1VW 06.16	DSGS: D8706	producer overview dated 30/03/2023	5)

**Table 1c Water based paints reflective type II**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
48	23/10/2015	water based paint	LIMBORROUTE LW48F Flugplatz	x		II	MEGALUX-BEADS 600 - 1400 T14 K25	SWARCO	600	RAL 9015 traffic white	97 1W 12.07	DSGS: D8608, D8706	producer overview dated 30/03/2023	6)



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**Table 2a High-solid paints non-reflective**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromatometry-coordinates and β-value	proof of resistance to chemicals	comments
49	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 9016 traffic white	2020 1DS 05.10	DSGS: D8608	producer overview dated 30/03/2023	
50	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 1023 traffic yellow	2020 1DS 05.10	DSGS: D8608	producer overview dated 30/03/2023	
51	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 2009 traffic orange	2020 1DS 05.10	DSGS: D8608	producer overview dated 30/03/2023	
52	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 3020 traffic red	2020 1DS 05.10	DSGS: D8625	producer overview dated 30/03/2023	
53	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 5015 sky blue	2020 1DS 05.10	DSGS: D8608	producer overview dated 30/03/2023	2)
54	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	blue according to ICAO	2020 1DS 05.10	DSGS: D8727	producer overview dated 30/03/2023	2)
55	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 6010 grass green	2020 1DS 05.10	DSGS: D8608	producer overview dated 30/03/2023	3)
56	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	green according to ICAO	2020 1DS 05.10	DSGS: D8727	producer overview dated 30/03/2023	3)
57	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	300	RAL 9017 traffic black	2020 1DS 05.10	DSGS: D8625	producer overview dated 30/03/2023	
58	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 9016 traffic white	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8608, D8727	producer overview dated 30/03/2023	
59	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 1023 traffic yellow	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8608, D8727	producer overview dated 30/03/2023	
60	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 2009 traffic orange	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8608, D8727	producer overview dated 30/03/2023	



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**Table 2a High-solid paints non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
61	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 3020 traffic red	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8625, D8727	producer overview dated 30/03/2023	
62	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 5015 sky blue	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8608, D8727	producer overview dated 30/03/2023	2)
63	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	blue according to ICAO	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	2)
64	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 6010 grass green	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8608, D8727	producer overview dated 30/03/2023	3)
65	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	green according to ICAO	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	3)
66	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	400	RAL 9017 traffic black	2007 1DS 08.11 2009 1DS 03.11 2010 1DS 07.03 2012 1DS 01.06 2021 1VS 05.08	DSGS: D8625, D8727	producer overview dated 30/03/2023	
67	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	RAL 9016 traffic white	2012 1DS 01.10	DSGS: D8608	producer overview dated 30/03/2023	
68	23/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	RAL 1023 traffic yellow	2012 1VS 01.09	DSGS: D8608	producer overview dated 30/03/2023	
69	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	RAL 2009 traffic orange	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8608	producer overview dated 30/03/2023	
70	05/07/2016	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	RAL 3020 traffic red	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	
71	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	RAL 5015 sky blue	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8608	producer overview dated 30/03/2023	2)
72	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz		x	without	---	---	600	blue according to ICAO	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8727	producer overview dated 30/03/2023	2)





**Table 2a** High-solid paints non-reflective (continued)

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-re-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromatocity-coordinates and β-value	proof of resistance to chemicals	comments
73	23/10/2015	high-solid paint	LIMBORROUTE K2B2F Flugplatz		x	without	----	----	600	RAL 6010 grass green	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8608	producer overview dated 30/03/2023	3)
74	24/04/2023	high-solid paint	LIMBORROUTE K2B2F Flugplatz		x	without	----	----	600	green according to ICAO	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8727	producer overview dated 30/03/2023	3)
75	06/07/2016	high-solid paint	LIMBORROUTE K2B2F Flugplatz		x	without	----	----	600	RAL 9017 traffic black	2012 1DS 01.10 2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	

**Table 2b High-solid paints reflective type I**

No.	date of issue	kind of marking material	name of marking material	re- flective	non- re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast.-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
76	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	300	RAL 9016 traffic white	2020 1DS 05.10	DSGS: D8703	producer overview dated 30/03/2023	
77	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	400	RAL 9016 traffic white	2007 1DS 08.11	DSGS: D8608	producer overview dated 30/03/2023	
78	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	SWARCOFLEX 100 - 600 T14 M25	SWARCO	400	RAL 9016 traffic white	2009 1DS 03.11	DSGS: D8608	producer overview dated 30/03/2023	
79	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	SWARCOLUX P21 T14 M25	SWARCO	400	RAL 9016 traffic white	2010 1DS 07.03	DSGS: D8608	producer overview dated 30/03/2023	
80	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	400	RAL 9016 traffic white	2012 1DS 01.06	DSGS: D8608	producer overview dated 30/03/2023	
81	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 1023 traffic yellow	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	
82	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 2009 traffic orange	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	
83	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 3020 traffic red	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	
84	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 5015 sky blue	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	4)
85	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	blue according to ICAO	2021 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	4)
86	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 6010 grass green	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	3)
87	24/04/2023	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	green according to ICAO	2021 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	3)
88	24/11/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	RAL 9017 traffic black	2021 1VS 05.08	DSGS: D8717	producer overview dated 30/03/2023	5)

**Table 2b High-solid paints reflective type II**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Best-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
89	01/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 M25	SWARCO	600	RAL 9016 traffic white	2012 1DS 01.10	DSGS: D8608	producer overview dated 30/03/2023	6)
90	23/10/2015	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 1023 traffic yellow	2012 1VS 01.09	DSGS: D8608	producer overview dated 30/03/2023	6)
91	04/06/2021	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 2009 traffic orange	2012 1VS 01.09	DSGS: D8703	producer overview dated 30/03/2023	6)
92	05/07/2016	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 3020 traffic red	2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	6)
93	06/07/2016	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 5015 sky blue	2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	4), 6)
94	06/07/2016	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 6010 grass green	2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	3), 6)
95	06/07/2016	high-solid paint	LIMBOROUTE K282F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 9017 traffic black	2012 1VS 01.09	DSGS: D8625	producer overview dated 30/03/2023	5), 6)

**Table 3a 2-component high-solid paints non-reflective**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Basst-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
96	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 9016 traffic white	2005 1DS 07.17 2020 1DS 04.10	DSGS: D8608	producer overview dated 30/03/2023	
97	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 1023 traffic yellow	2020 1VS 05.08	DSGS: D8608	producer overview dated 30/03/2023	
98	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 2009 traffic orange	2020 1VS 05.08	DSGS: D8608	producer overview dated 30/03/2023	
99	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 3020 traffic red	2020 1VS 05.08	DSGS: D8625	producer overview dated 30/03/2023	
100	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 5015 sky blue	2020 1VS 05.08	DSGS: D8608	producer overview dated 30/03/2023	2)
101	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	blue according to ICAO	2020 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	2)
102	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 6010 grass green	2020 1VS 05.08	DSGS: D8608	producer overview dated 30/03/2023	3)
103	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	green according to ICAO	2020 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	3)
104	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	300	RAL 9017 traffic black	2020 1VS 05.08	DSGS: D8625	producer overview dated 30/03/2023	
105	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 9016 traffic white	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8608, D8727	producer overview dated 30/03/2023	
106	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 1023 traffic yellow	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8608, D8727	producer overview dated 30/03/2023	
107	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 2009 traffic orange	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8608, D8727	producer overview dated 30/03/2023	
108	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 3020 traffic red	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8625, D8727	producer overview dated 30/03/2023	



**Table 3a 2-component high-solid paints non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
109	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 5015 sky blue	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8608, D8727	producer overview dated 30/03/2023	2)
110	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	blue according to ICAO	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8727	producer overview dated 30/03/2023	2)
111	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 6010 grass green	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8608, D8727	producer overview dated 30/03/2023	3)
112	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	green according to ICAO	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8727	producer overview dated 30/03/2023	3)
113	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	400	RAL 9017 traffic black	2005 1DS 04.07 2007 1DS 08.10 2021 1VS 05.09	DSGS: D8625, D8727	producer overview dated 30/03/2023	
114	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 9016 traffic white	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2018 1DS 05.04	DSGS: D8608	producer overview dated 30/03/2023	
115	23/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 1023 traffic yellow	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8608	producer overview dated 30/03/2023	7)
116	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 2009 traffic orange	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8608	producer overview dated 30/03/2023	7)
117	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 3020 traffic red	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8625	producer overview dated 30/03/2023	7)
118	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 5015 sky blue	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8608	producer overview dated 30/03/2023	2), 7)
119	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	blue according to ICAO	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8727	producer overview dated 30/03/2023	2), 7)
120	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz		x	without	---	---	600	RAL 6010 grass green	2005 1DS 05.07 2006 1DS 02.08 2013 1DS 08.05 2012 1VS 01.12 2018 1DS 05.04	DSGS: D8608	producer overview dated 30/03/2023	3), 7)

**Table 3a 2-component high-solid paints non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
121	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K609F Flugplatz		x	without	---	---	600	green according to ICAO	2005 IDS 05.07 2006 IDS 02.08 2013 IDS 08.05 2012 IVS 01.12 2018 IDS 05.04	DSGS: D8727	producer overview dated 30/03/2023	3), 7)
122	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K609F Flugplatz		x	without	---	---	600	RAL 9017 traffic black	2005 IDS 05.07 2006 IDS 02.08 2013 IDS 08.05 2012 IVS 01.12 2018 IDS 05.04	DSGS: D8625	producer overview dated 30/03/2023	7)

**Table 3b 2-component high-solid paints reflective type I**

No.	date of issue	kind of marking material	name of marking material	re- flective	non- re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
123	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	SWARCOLUX P21 T14 M25	SWARCO	300	RAL 9016 traffic white	2005 1DS 07.17	DSGS: D8608	producer overview dated 30/03/2023	
124	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	300	RAL 9016 traffic white	2020 1DS 04.10	DSGS: D8703	producer overview dated 30/03/2023	
125	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 1023 traffic yellow	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	
126	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 2009 traffic orange	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	
127	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 3020 traffic red	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	
128	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 5015 sky blue	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	4)
129	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	blue according to ICAO	2020 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	4)
130	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 6010 grass green	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	3)
131	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	green according to ICAO	2020 1VS 05.08	DSGS: D8727	producer overview dated 30/03/2023	3)
132	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	300	RAL 9017 traffic black	2020 1VS 05.08	DSGS: D8703	producer overview dated 30/03/2023	5)
133	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 M30	SWARCO	400	RAL 9016 traffic white	2007 1DS 08.10	DSGS: D8608	producer overview dated 30/03/2023	
134	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	SWARCOLUX P21 T14 M25	SWARCO	400	RAL 9016 traffic white	2005 1DS 04.07	DSGS: D8608	producer overview dated 30/03/2023	
135	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	blue according to ICAO	2021 1VS 05.09	DSGS: D8727	producer overview dated 30/03/2023	4)

**Table 3b** 2-component high-solid paints reflective type I (continued)

No.	date of issue	kind of marking material	name of marking material	re-flective	non-re-flective	type of marking	name of drop-on material	producer of drop-on material	thick-ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
136	24/04/2023	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		I	Flughafenperle Typ I T14 GG30	SWARCO	400	green according to ICAO	2021 1VS 05.09	DSGS: D8727	producer overview dated 30/03/2023	3)

**Table 3c** 2-component high-solid paints reflective type II

No.	date of issue	kind of marking material	name of marking material	re-flective	non-re-flective	type of marking	name of drop-on material	producer of drop-on material	thick-ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
137	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	MEGALUX-BEADS 600-1400 T14 K25	SWARCO	600	RAL 9016 traffic white	2005 1DS 05.07	DSGS: D8608	producer overview dated 30/03/2023	
138	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 M25	SWARCO	600	RAL 9016 traffic white	2006 1DS 02.08	DSGS: D8608	producer overview dated 30/03/2023	8)
139	09/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 M25	SWARCO	600	RAL 9016 traffic white	2013 1DS 08.05	DSGS: D8608	producer overview dated 30/03/2023	8)
140	04/06/2021	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	SWARCOLUX 50 425 - 1400 T14 MK30	SWARCO	600	RAL 9016 traffic white	2018 1DS 05.04	DSGS: D8703	producer overview dated 30/03/2023	6)
141	23/10/2015	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 1023 traffic yellow	2012 1VS 01.12	DSGS: D8608	producer overview dated 30/03/2023	6), 8)
142	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 2009 traffic orange	2012 1VS 01.12	DSGS: D8625	producer overview dated 30/03/2023	6), 8)
143	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 3020 traffic red	2012 1VS 01.12	DSGS: D8625	producer overview dated 30/03/2023	6), 8)
144	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 5015 sky blue	2012 1VS 01.12	DSGS: D8625	producer overview dated 30/03/2023	4), 6), 8)
145	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 6010 grass green	2012 1VS 01.12	DSGS: D8625	producer overview dated 30/03/2023	3), 6), 8)
146	06/07/2016	2-component high-solid paint	LIMBOROUTE 2-K K809F Flugplatz	x		II	Flughafenperle Typ II T14 GG30	SWARCO	600	RAL 9017 traffic black	2012 1VS 01.12	DSGS: D8625	producer overview dated 30/03/2023	5), 6), 8)



Table 4a Cold spray plastics non-reflective

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
147	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 9016 traffic white	2008 1DY 03.09	DSGS: D8608	producer overview dated 30/03/2023	
148	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 1023 traffic yellow	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8608	producer overview dated 30/03/2023	
149	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 2009 traffic orange	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	
150	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 3020 traffic red	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8625	producer overview dated 30/03/2023	
151	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 5015 sky blue	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8608	producer overview dated 30/03/2023	2), 9)
152	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	blue according to ICAO	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8727	producer overview dated 30/03/2023	2)
153	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 6010 grass green	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8608	producer overview dated 30/03/2023	3)
154	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	green according to ICAO	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8727	producer overview dated 30/03/2023	3)
155	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	300	RAL 9017 traffic black	2020 1DY 09.01 2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	
156	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 9016 traffic white	2008 1DY 03.08	DSGS: D8608	producer overview dated 30/03/2023	
157	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 1023 traffic yellow	2019 1VY 02.15	DSGS: D8608	producer overview dated 30/03/2023	10)
158	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 2009 traffic orange	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	10)
159	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 3020 traffic red	2019 1VY 02.15	DSGS: D8625	producer overview dated 30/03/2023	10)

**Table 4a Cold spray plastics non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromatificity-coordinates and β-value	proof of resistance to chemicals	comments
160	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 5015 sky blue	2019 1VY 02.15	DSGS: D8608	producer overview dated 30/03/2023	2), 9), 10)
161	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	blue according to ICAO	2019 1VY 02.15	DSGS: D8727	producer overview dated 30/03/2023	2), 10)
162	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 6010 grass green	2019 1VY 02.15	DSGS: D8608	producer overview dated 30/03/2023	3), 10)
163	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	green according to ICAO	2019 1VY 02.15	DSGS: D8727	producer overview dated 30/03/2023	3), 10)
164	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	400	RAL 9017 traffic black	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	10)
165	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 9016 traffic white	2012 1DY 08.10	DSGS: D8608	producer overview dated 30/03/2023	
166	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 1023 traffic yellow	2012 1DY 08.10	DSGS: D8608	producer overview dated 30/03/2023	
167	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 2009 traffic orange	2012 1DY 08.10	DSGS: D8702	producer overview dated 30/03/2023	
168	07/07/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 3020 traffic red	2012 1DY 08.10	DSGS: D8625	producer overview dated 30/03/2023	
169	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 5015 sky blue	2012 1DY 08.10	DSGS: D8608	producer overview dated 30/03/2023	2), 9)
170	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	blue according to ICAO	2012 1DY 08.10	DSGS: D8727	producer overview dated 30/03/2023	2)
171	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 6010 grass green	2012 1DY 08.10	DSGS: D8608	producer overview dated 30/03/2023	3)
172	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	green according to ICAO	2012 1DY 08.10	DSGS: D8727	producer overview dated 30/03/2023	3)



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**Table 4a Cold spray plastics non-reflective (continued)**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
173	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz		x	without	---	---	600	RAL 9017 traffic black	2012 1DY 08.10	DSGS: D8702	producer overview dated 30/03/2023	

**Table 4b Cold spray plastics reflective type I**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
174	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 M30	SWARCO	300	RAL 9016 traffic white	2020 1DY 09.01	DSGS: D8702	producer overview dated 30/03/2023	
175	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 1023 traffic yellow	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	
176	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 2009 traffic orange	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	
177	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 3020 traffic red	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	
178	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 5015 sky blue	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	4)
179	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	blue according to ICAO	2020 1VY 11.12	DSGS: D8727	producer overview dated 30/03/2023	4)
180	04/01/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 6010 grass green	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	3)
181	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	green according to ICAO	2020 1VY 11.12	DSGS: D8727	producer overview dated 30/03/2023	3)
182	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	300	RAL 9017 traffic black	2020 1VY 11.12	DSGS: D8702	producer overview dated 30/03/2023	5)
183	04/01/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 1023 traffic yellow	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	10)
184	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 2009 traffic orange	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	10)
185	04/01/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 3020 traffic red	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	10)
186	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 5015 sky blue	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	4), 10)

**Table 4b** Cold spray plastics reflective type I (continued)

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Best-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
187	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	blue according to ICAO	2019 1VY 02.15	DSGS: D8727	producer overview dated 30/03/2023	4), 10)
188	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 6010 grass green	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	3), 10)
189	24/04/2023	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	green according to ICAO	2019 1VY 02.15	DSGS: D8727	producer overview dated 30/03/2023	3), 10)
190	04/06/2021	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	400	RAL 9017 traffic black	2019 1VY 02.15	DSGS: D8702	producer overview dated 30/03/2023	5), 10)

**Table 4c** Cold spray plastics reflective type II

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Best-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
191	06/05/2016	cold spray plastic	LIMBOPLAST KSP 120F Flugplatz	x		II	Flughafenperle Typ II T18 M25	SWARCO	600	RAL 9016 traffic white	2012 1DY 08.10	DSGS: D8608	producer overview dated 30/03/2023	6)

**Table 5a Cold plastics non-reflective**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
192	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 9016 traffic white	2011 1DK 04.01	DSGS: D8608	producer overview dated 30/03/2023	11)
193	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 1023 traffic yellow	2011 1DK 04.01	DSGS: D8608	producer overview dated 30/03/2023	11)
194	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 2009 traffic orange	2011 1DK 04.01	DSGS: D8608	producer overview dated 30/03/2023	11)
195	07/07/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 3020 traffic red	2011 1DK 04.01	DSGS: D8625	producer overview dated 30/03/2023	11)
196	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 5015 sky blue	2011 1DK 04.01	DSGS: D8608	producer overview dated 30/03/2023	2), 11)
197	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	blue according to ICAO	2011 1DK 04.01	DSGS: D8727	producer overview dated 30/03/2023	2), 11)
198	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 6010 grass green	2011 1DK 04.01	DSGS: D8608	producer overview dated 30/03/2023	3), 11)
199	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	green according to ICAO	2011 1DK 04.01	DSGS: D8727	producer overview dated 30/03/2023	3), 11)
200	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	2000	RAL 9017 traffic black	2011 1DK 04.01	DSGS: D8700	producer overview dated 30/03/2023	11)
201	06/05/2016	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 9016 traffic white	2002 1DK 05.10 2002 1DK 07.07 2019 1VK 03.16 2020 1DK 12.17	DSGS: D8608 D8700	producer overview dated 30/03/2023	11)
202	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 1023 traffic yellow	2002 1DK 05.10 2002 1DK 07.07 2019 1VK 03.16 2020 1DK 12.17 2020 1VK 12.18	DSGS: D8608 D8700	producer overview dated 30/03/2023	11)
203	04/07/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 2009 traffic orange	2002 1DK 05.10 2002 1DK 07.07 2019 1VK 03.16 2020 1DK 12.17 2020 1VK 12.18	DSGS: D8608 D8700	producer overview dated 30/03/2023	11)



**Table 5a** Cold plastics non-reflective (continued)

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromatimetry-coordinates and β-value	proof of resistance to chemicals	comments
204	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 3020 traffic red	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8625 D8700	producer overview dated 30/03/2023	11)
205	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 5015 sky blue	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8608 D8700	producer overview dated 30/03/2023	2), 11)
206	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	blue according to ICAO	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8727	producer overview dated 30/03/2023	2), 11)
207	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 6010 grass green	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8608 D8700	producer overview dated 30/03/2023	3), 11)
208	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	green according to ICAO	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8727	producer overview dated 30/03/2023	3), 11)
209	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz		x	without	---	---	3000	RAL 9017 traffic black	2002 1DK 05 10 2002 1DK 07 07 2019 1VK 03 16 2020 1DK 12 17 2020 1VK 12 18	DSGS: D8700	producer overview dated 30/03/2023	11)

Table 5b Cold plastics reflective type I

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	East-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
210	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 M30	SWARCO	3000	RAL 9016 traffic white	2020 1DK 12.17	DSGS: D8700	producer overview dated 30/03/2023	11)
211	04/01/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 1023 traffic yellow	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	11)
212	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 2009 traffic orange	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	11)
213	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 3020 traffic red	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	11)
214	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 5015 sky blue	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	4), 11)
215	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	blue according to ICAO	2019 1VK 03.16	DSGS: D8727	producer overview dated 30/03/2023	4), 11)
216	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 6010 grass green	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	3), 11)
217	24/04/2023	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	green according to ICAO	2019 1VK 03.16	DSGS: D8727	producer overview dated 30/03/2023	3), 11)
218	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	3000	RAL 9017 traffic black	2019 1VK 03.16	DSGS: D8700	producer overview dated 30/03/2023	5), 11)





**Table 5c Cold plastics reflective type II**

No.	date of issue	kind of marking material	name of marking material	re- flective	non-re- flective	type of marking	name of drop-on material	producer of drop-on material	thick- ness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
219	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 1023 traffic yellow	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	6), 11)
220	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 2009 traffic orange	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	6), 11)
221	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 3020 traffic red	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	6), 11)
222	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 5015 sky blue	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	4), 6), 11)
223	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 6010 grass green	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	3), 6), 11)
224	04/06/2021	cold plastic	LIMBOPLAST D480 F Flugplatz	x		II	Flughafenperle Typ II T18 GG30	SWARCO	3000	RAL 9017 traffic black	2020 1VK 12.18	DSGS: D8700	producer overview dated 30/03/2023	5), 6), 11)

**Table 6a Roll plastics non-reflective**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
225	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 9016 traffic white	2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11)
226	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 1023 traffic yellow	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
227	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 2009 traffic orange	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
228	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 3020 traffic red	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
229	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 5015 sky blue	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	2), 11), 12)
230	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 6010 grass green	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	3), 11), 12), 13)
231	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	1500	RAL 9017 traffic black	2020 1VK 11.13 2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
232	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 9016 traffic white	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)
233	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 1023 traffic yellow	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)
234	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 2009 traffic orange	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)
235	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 3020 traffic red	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)
236	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 5015 sky blue	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	2), 11)
237	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 6010 grass green	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	3), 11), 13)



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**Table 6a** Roll plastics non-reflective (continued)

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
238	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	2000	RAL 9017 traffic black	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)
239	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 9016 traffic white	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	11)
240	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 1023 traffic yellow	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	11)
241	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 2009 traffic orange	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	11)
242	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 3020 traffic red	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	11)
243	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 5015 sky blue	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	2), 11)
244	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 6010 grass green	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	3), 11), 13)
245	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz		x	without	---	---	3000	RAL 9017 traffic black	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	11)

**Table 6b Roll plastics reflective type I**

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
246	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 M30	SWARCO	1500	RAL 9016 traffic white	2020 1DK 11.14	DSGS: D8705	producer overview dated 09/03/2021	11)
247	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 1023 traffic yellow	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
248	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 2009 traffic orange	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
249	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 3020 traffic red	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	11), 12)
250	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 5015 sky blue	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	4), 11), 12)
251	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 6010 grass green	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	3), 11), 12)
252	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	Flughafenperle Typ I T18 GG30	SWARCO	1500	RAL 9017 traffic black	2020 1VK 11.13	DSGS: D8705	producer overview dated 09/03/2021	5), 11), 12)
253	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		I	SWARCO SOLIDPLUS 100 212 - 850 T18 M35	SWARCO	2000	RAL 9016 traffic white	2015 1DK 05.13	DSGS: D8705	producer overview dated 09/03/2021	11)

**Table 6c** Roll plastics reflective type II

No.	date of issue	kind of marking material	name of marking material	re-reflective	non-reflective	type of marking	name of drop-on material	producer of drop-on material	thickness [µm]	colour	Bast-No.	proof of chromaticity-coordinates and β-value	proof of resistance to chemicals	comments
254	04/06/2021	cold plastic	ROLLPLASTIK RP 15F Flugplatz	x		II	SWARCO SOLIDPLUS 10 425 - 1400 T18 MK30	SWARCO	3000	RAL 9016 traffic white	2020 1DK 10.10	DSGS: D8705	producer overview dated 09/03/2021	(6), 11)



comments:

- 1) Under the number 2020 1VW 05.07 there is a confirmation from BAST (Bundesanstalt für Straßenwesen, German Federal Highway Research Institute) about the testing of a marking system on the turntable wear simulator. The measurement results meet the requirements of the "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany). This confirmation is therefore rated as equivalent to a BAST test certificate.
- 2) For non-reflective blue markings there are no requirements for chromaticity co-ordinates and luminance factor  $\beta$  according to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) as well as ICAO and EASA.
- 3) According to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) the RAL colour 6010 grass green is recommended though the colour is not within the colour box given by ICAO and EASA.
- 4) According to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) the RAL colour 5015 sky blue is recommended though the colour is not within the colour box given by ICAO and EASA.
- 5) For reflective black markings there are no requirements for chromaticity co-ordinates and luminance factor  $\beta$  according to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) as well as ICAO and EASA.
- 6) According to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) basically there should be applied only thin layer markings type I on surfaces with rolling aircrafts. This product is a type II marking system.
- 7) The marking system has achieved the roll over class T 4 (slowly drying) according to BAST Test certificate No. 2012 1VS 01.12 and is not suitable for applications on manoeuvring surfaces in use.
- 8) The marking system has achieved the roll over class T 4 (slowly drying) according to BAST Test certificate and is not suitable for applications on manoeuvring surfaces in use.
- 9) The visual comparison of the sample probe with a RAL-card K5 classic semi matt RAL 5015 sky blue showed that the sample probe was slightly brighter.
- 10) Under the number 2019 1VY 02.15 there is a confirmation from BAST (Bundesanstalt für Straßenwesen, German Federal Highway Research Institute) about the testing of a marking system on the turntable wear simulator. The measurement results meet the requirements of the "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany). This confirmation is therefore rated as equivalent to a BAST test certificate.
- 11) According to "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany) basically there should be applied only thin layer markings type I on surfaces with rolling aircrafts. This product is a thick layer marking system.
- 12) Under the number 2020 1VK 11.13 there is a confirmation from BAST (Bundesanstalt für Straßenwesen, German Federal Highway Research Institute) about the testing of a marking system on the turntable wear simulator. The measurement results meet the requirements of the "Hinweise für Markierungen auf Flugbetriebsflächen", Ausgabe 2018 ("Instructions for markings on manoeuvring areas", edition 2018, Germany). This confirmation is therefore rated as equivalent to a BAST test certificate.
- 13) The visual comparison of the sample probe with a RAL-card K5 classic semi matt RAL 6010 grass green showed that the sample probe was slightly brighter.