

Company profile

DULIGHT was founded in year 2002, the address is NO 330 JIN QUAN ROAD, JINZHOU DISTRICT, DALIAN, LIAONING, CHINA. We have established our branch company Dulight Signage & Flag Manufacturing Co., Ltd in year 2002 (hereinafter Dulight) , create DULIGHT brand. Dulight is specialized in manufacture marine IMO symbols, pipe markers and marine flags. Our product has been won the bidding of MODEC FPSO project and new buildings of China Shipping Development Company Ltd.



Instruction of Luminescent vinyl and board

Brief introduction

Luminescent film that DULIGHT STICKER adopt is a sort of luminescent patent product .It is a kind of sort plastic luminescent thin film.it can contain adhesive and backing paper on the back of the film.This product is nontoxic,harmless,and it does not contain any radioactive element,It has various colors with higher luminance and long life.

Product technical standard

Model:LM-M-OY-015

Body color:Yellow-green

Glowing color:Yellow-green

Luminance mcd/m²:90mcd/m² within 10mins,15mcd/m² within 60mins

Normal size:1000mm*1200mm

Thickness:1.2mm

Lighting lasted time:over1000mins

Mainly capability

- 1.This film is made byPVCmaterial,which has property of flaming resistance.
- 2.Has property of salt resistance and can be cleaned(using scour is okay).
- 3.Has good property of hot resistance,cold resistance,be suitable used between-20 ~ 50°C.
- 4.With good physical mechanical property.
- 5.Can be stick on the surface of normal object after peeling off the backing paper.

Application and remarks need to be noticed:

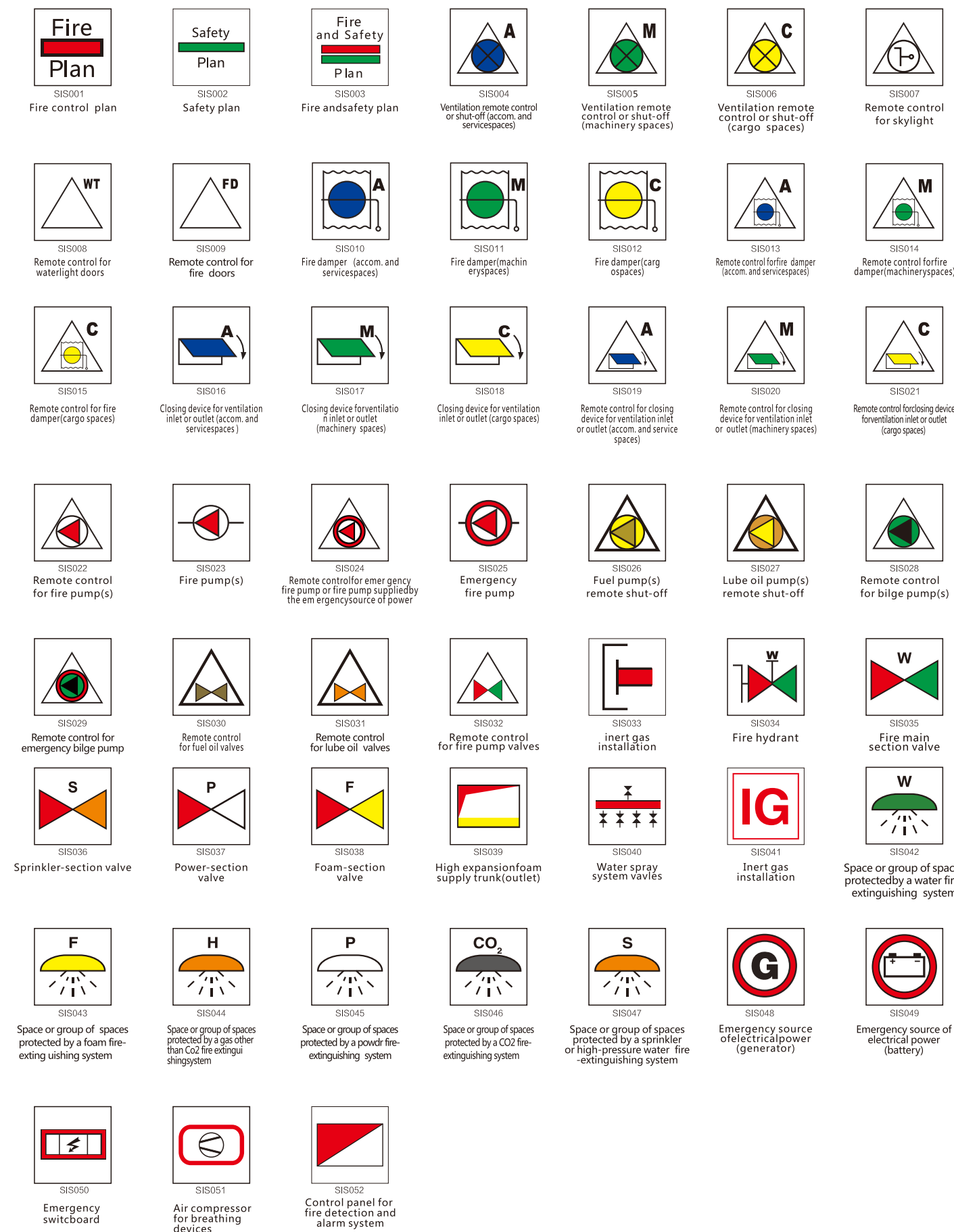
- 1.Working on the even surface,working temperature is 10-40°C.
- 2.This luminescent film can be cut into all kinds of shapes,it can be stick on somewhere,which has the effect of decoration and indication.
- 3.It can be printed design on the surface of luminescent film by silk screen printing or other ways,to engender background glow.
- 4.Please clean up the object surface before sticking the film,stain and dust is unacceptable.
- 5.Our luminescent vinyl has the certain property of expand when heating shrink when cooling ,this vinyl can not be placed at random,it should be pressed by heavy things when placed,to avoid of distortion or curl.
- 6.The size of backing paper is affected much by the humidity,please process vinyl after cutting in the environment with relative humidity 40-60%,to avoid of crinkle.
- 7.Please peel off the backing paper when using,stick the vinyl on the well worked surface with certain press,be note stick well the side and angle.
- 8.In order to ensure the luminance,the color of different model will have some difference in same series.

Packing and storage

- 1.Packing: in roll or in piece,outer packing is plastical foil.
- 2.Storage:it should be stored in ventilative,dry,shady and cool warehouse,storage temperature is 15-30°C,relative humidity is 40-60%



IMO releases A.1116 (30) Identification symbols for ship fire control diagrams



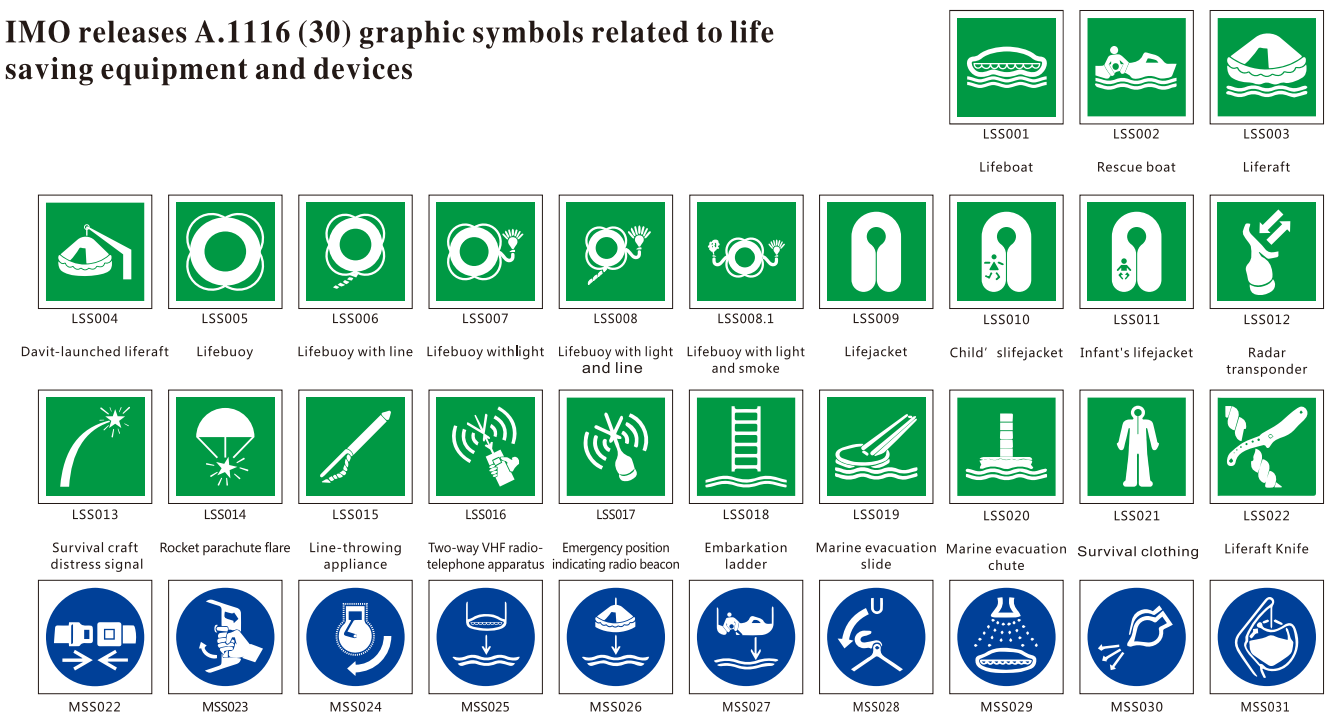
IMO releases A.1116 (30) Identification symbols for ship fire control diagrams



IMO releases A.1116 (30) Identification symbols for ship fire control diagrams



IMO releases A.1116 (30) graphic symbols related to life saving equipment and devices



DNV CERTIFICATE

TEST REPORT				
No. : T/JN2011018934MR				
Date : Nov 17, 2020				
Page: 2 of 4				
Summary of Results				
No.	Test Item	Test Method	Result	Conclusion
1	Flame-Retardant Test	ISO 1570:2010 Section 4.2.7 & IEC 60090-101:2002 Section 2.28.2	See result	/
Note: Pass - Meet the requirements; Fail - Does not meet the requirements; / - Not Applicable to the judgment.				
Original Sample Photo				
				
				

MODEC SAMPLE

→	DIESEL OIL	→	→	BALLAST	→	→	COOLING FRESH WATER	→	→	WATER SPRAY	→
→	DIESEL OIL	→	→	BALLAST	→	→	COOLING FRESH WATER	→	→	WATER SPRAY	→
→	DIESEL OIL	→	→	BALLAST	→	→	COOLING FRESH WATER	→	→	WATER SPRAY	→
→	DIESEL OIL	→	→	BALLAST	→	→	COOLING FRESH WATER	→	→	WATER SPRAY	→
→	DIESEL OIL	→	→	BALLAST	→	→	COOLING FRESH WATER	→	→	WATER SPRAY	→

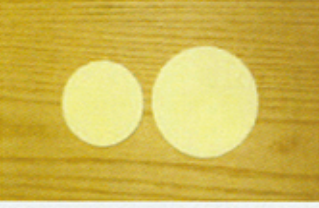
→	FIRE WATER	→	→	LOCAL WATER MIST	→	→	SEA WATER	→
→	FIRE WATER	→	→	LOCAL WATER MIST	→	→	SEA WATER	→
→	FIRE WATER	→	→	LOCAL WATER MIST	→	→	SEA WATER	→
→	FIRE WATER	→	→	LOCAL WATER MIST	→	→	SEA WATER	→
→	FIRE WATER	→	→	LOCAL WATER MIST	→	→	SEA WATER	→

PIPELINE COLOR BAND

Tapes

Generally photoluminescent tape is used for two main duties, way finding (Low Location Lighting see page 10 & 11) and area identification. Area identification can assist crew and passengers locate emergency equipment in the event of a 'black out'.

A machinery space can be a confusing area, even to crew familiar with their surroundings, when all light is lost. Identifying telephones, fire fighting equipment, low deck beams and protruding pipes, valves, hand rails, trip hazards etc. can save valuable time and possibly lives in the event of an emergency. Where used as part of a LLL system installers must ensure adequate light is available to activate the photoluminescent material to attain the required performance.

	Vinyl Tape Photoluminescent self adhesive vinyl Emergency equipment marking Handrail identification Stair identification 40mm wide x 10m 2014 PV ▲ 80mm wide x 10m 2018 PV ▲		Way Finding Tape Photoluminescent self adhesive vinyl Directional route marking Way finding, supplied with 10 left and 10 right handed decals to allow tape to indicate either direction 40mm wide x 10m 2024 PV ▲ 80mm wide x 10m 2028 PV ▲
	Green Diagonal Tape Photoluminescent self adhesive vinyl Marking safe areas Exit door highlighting Escape identification 40mm wide x 10m 2034 PV ▲ 80mm wide x 10m 2038 PV ▲		Barrier Tape Non - Self adhesive Polyethylene Hazardous area marking No entry marking Red & White Barrier Tape 75mm wide x 500m 2005 CV ▲ Black & Yellow Barrier Tape 75mm wide x 500m 2006 CV ▲
	Black Diagonal Tape Photoluminescent self adhesive vinyl Danger zone marking Obstacle marking 40mm wide x 10m 2044 PV ▲ 80mm wide x 10m 2048 PV ▲		Self Adhesive SOLAS Tape Lifeboat marking Lifejacket marking Safety equipment marking Deck safety route marking 50mm wide x 45m 2000 ST ▲
	Red Diagonal Tape Photoluminescent self adhesive vinyl Highlighting fire-fighting equipment Hazard marking 40mm wide x 10m 2054 PV ▲ 80mm wide x 10m 2058 PV ▲		Non-slip Self Adhesive Tape Nose of stairs Escape routes on deck Walkways on deck Galleys Engine room ladders 50mm wide x 18m 2001 NS ▲ 100mm wide x 18m 2002 NS ▲
	Trail Marker Arrow Dots Self adhesive rigid photoluminescent Directional deck marking of escape routes 60mm diameter 2086 PR ▲ 80mm diameter 2088 PR ▲		Trail Marker Dots Self adhesive rigid photoluminescent Deck marking of escape routes Highlighting switches and controls 60mm diameter 2096 PR ▲ 80mm diameter 2098 PR ▲
	Non-slip Photoluminescent Self Adhesive Tape Nose of stairs Escape routes on deck Walkways on deck Galleys Engine room ladders 50mm wide x 18m 2009 NS ▲		Non-slip Photoluminescent Self Adhesive Tape Nose of stairs Escape routes on deck Walkways on deck Galleys Engine room ladders 50mm wide x 18m 2009 NS ▲

PIPELINE COLOR BAND

Regulations
ISO 14726 (2008) Ships and marine technology - Identification colours for the content of piping systems.

The chart below shows all the current permutations of identification colours. This system is not intended to identify medical or industrial gasses and cargos.



50mm 50mm 50mm 50mm
Recommended sizes

Waste Media	Ref. Nos.	Oil other than fuel	Ref. Nos.
Black water	2140-2141-2140	Thermal fluid	2146-2141-2146
Waste oil/Used oil	2140-2142-2140	Lubrication oil for gas turbines	2146-2143-2146
Bilge water	2140-2143-2140	Hydraulic fluid	2146-2144-2146
Exhaust gas	2140-2144-2140	Lubrication oil for steam turbines	2146-2147-2146
Grey water	2140-2150-2140	Lubrication oil for gears	2146-2149-2146
Sewage-contaminated	2140-2151-2140	Lub. oil for int. combustion engines	2146-2151-2146

Fresh Water	Ref. Nos.	Steam	Ref. Nos.
Fresh water, sanitary	2141-2142-2141	Steam for heating	2147-2140-2147
Potable water	2141-2143-2141	Exhaust steam	2147-2150-2147
Distillate	2141-2144-2141	Supply steam	2147-2151-2147
Gas turbine wash water	2141-2146-2141		
Feed water	2141-2147-2141		
Cooling fresh water	2141-2149-2141		
Chilled water	2141-2150-2141		
Condensate	2141-2151-2141		

Sea Water	Ref. Nos.	Air in ventilation systems	Ref. Nos.
Decontamination water	2143-2141-2143	Discharge air	2150-2140-2150
Sea water, sanitary	2143-2142-2143	Mechanical supply air-cold	2150-2141-2150
Ballast water	2143-2149-2143	Natural exhaust air	2150-2142-2150
Cooling sea water	2143-2151-2143	Atmospheric air	2150-2143-2150
		Mechanical exhaust air	2150-2144-2150
		Decontaminated supply air	2150-2145-2150
		Mechanical recirculated air	2150-2146-2150
		Mechanical supply air-warm	2150-2147-2150
		Smoke clearance	2150-2148-2150
		Conditioned supply air	2150-2149-2150
		Natural supply air	2150-2151-2150

Fuel	Ref. Nos.	Fire fighting/fire protection	Ref. Nos.
HFO (Heavy fuel oil)	2142-2140-2142	Fire-fighting water	2148-2143-2148
Aviation fuel	2142-2141-2142	Fire-fighting gas	2148-2144-2148
Biological fuel	2142-2149-2142	Sprinkler water	2148-2146-2148
Gas turbine fuel	2142-2150-2142	Spray water	2148-2149-2148
MDO (Marine diesel fuel)	2142-2151-2142	Fire-fighting powder	2148-2150-2148
		Fire-fighting foam	2148-2151-2148

Non-flammable gases	Ref. Nos.	Flammable gases	Ref. Nos.
Oxygen	2144-2141-2144	Hydrogen	2151-2141-2151
Inert gas	2144-2142-2144	Acetylene	2151-2144-2151
Nitrogen	2144-2143-2144	Liquid gas	2151-2149-2151
Refrigerant	2144-2145-2144		
Compressed air-low pressure	2144-2146-2144		
Compressed air-high pressure	2144-2148-2144		
Control air/Regulating air	2144-2149-2144		
Breathing air*	2144-2150-2144		
Breathing gas*	2144-2151-2144		

Flow arrows	Ref. No.
Flow arrows	2130

* Intended for use in submarines for distribution systems used for breathing air from cylinders.

PIPELINE COLOR BAND

Air and sounding pipes

	Ref. Nos.
Waste media	2145-2140-2145
Fresh water	2145-2141-2145
Fuel	2145-2142-2145
Sea water	2145-2143-2145
Non-flammable gases	2145-2144-2145
Oil other than fuels	2145-2146-2145
Steam	2145-2147-2145
Fire fighting	2145-2148-2145
Acids & Alkalis	2145-2149-2145
Ventilation system	2145-2150-2145
Flammable gases	2145-2151-2145



See page 57 for Pipe Colour Identification Poster



All pipe tapes on this page are offered as self adhesive rolls 50mm wide by 30m long.

Main colour	Colour	Product No	RAL	Pantone	Munsell code
Black		2140 CV ▲	9005	Black c	N1
Blue		2141 CV ▲	5015	PMS 2 925 c	2.5PB 3.5/10
Brown		2142 CV ▲	8001	PMS 154 c	5YR 3.5/4
Green		2143 CV ▲	6018	PMS 362 c	10GY 4/10
Grey		2144 CV ▲	7001	PMS 430 c	N5
Maroon		2145 CV ▲	8015	PMS 490 c	2.5RP 4/12
Orange		2146 CV ▲	2003	PMS 158 c	2.5YR 6/14
Silver		2147 CV ▲	9006	PMS 877 c	-
Red		2148 CV ▲	3000	PMS 1 797 c	7.5R 4/14
Violet		2149 CV ▲	4001	PMS 2 633 c	2.5P 4/11
White		2150 CV ▲	9010	White	N9.5
Yellow-ochre		2151 CV ▲	1021	PMS 116 c	2.5Y 8/14
Flow arrows		2130 CV ▲	Flow arrows	Flow arrows	Flow arrows

Installation

Pipelines should be marked at least once in each room; at each penetration point in bulkheads and decks, close to each valve and within a distance of 3-5m along the length of the pipeline. Local conditions may require more marking due to pipe bends or the close proximity of pipes for different services.

Prior to application, pipes should be dust and oil free. The tape should overlap by at least 20mm on the 'blind side' of the pipe, however on pipes with an external circumference of **over** 200mm the tape only needs to cover half the circumference of the pipe.

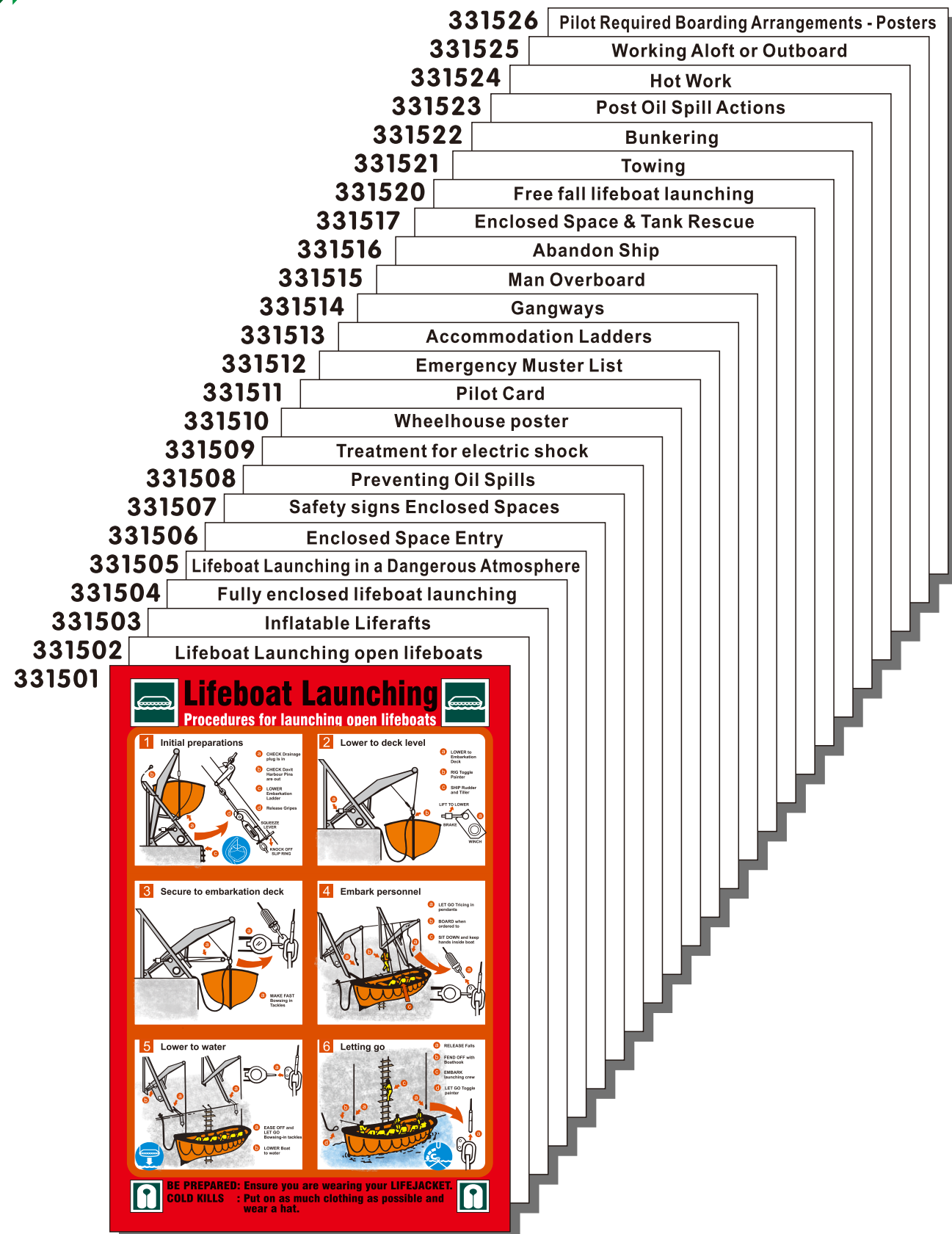
MAREFLEX Anti-Spray Tape

To protect pipeline installations against leakage in accordance with SOLAS Consolidated Edition 2004, Chapter II -2 Regulation 4 paragraph 2.2.5.3.

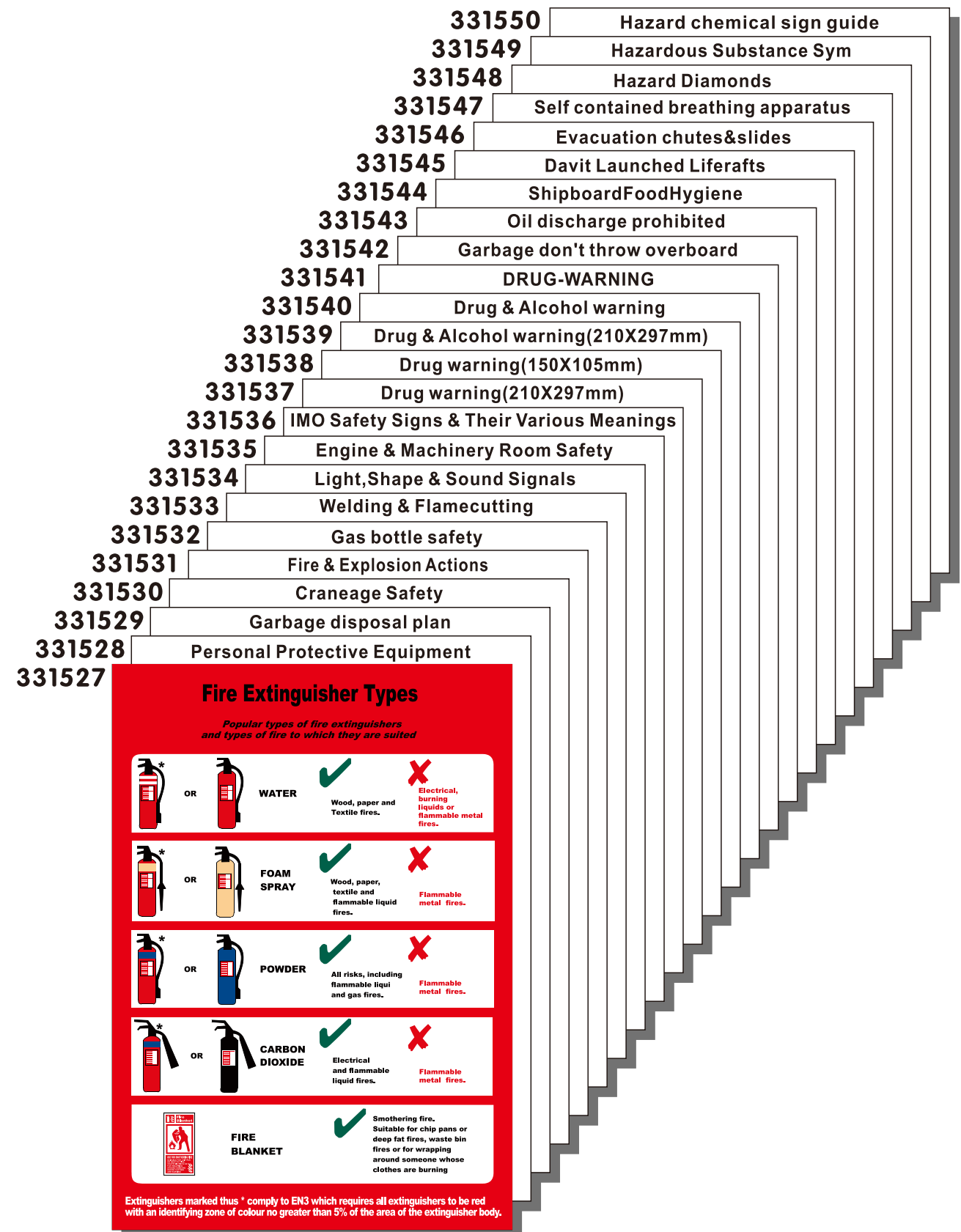
The anti-spray tape directs any potential leakage to areas where flammable substance will not be dangerous. Enhanced with a fire retardant (self extinguishing) adhesive layer which is also water resistant. The tape has a temperature range of up to 150°C.



POSTER

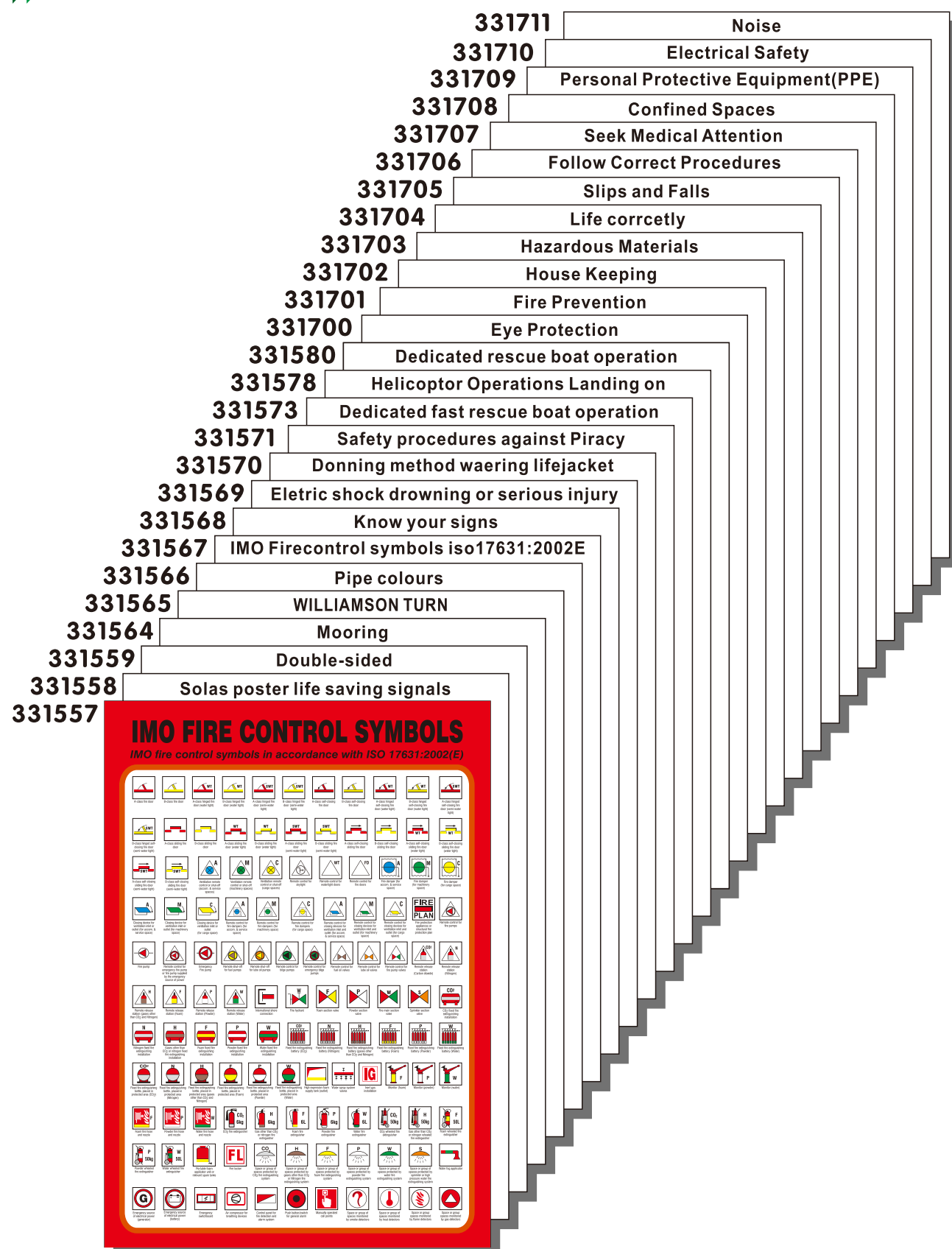


POSTER





POSTER



WARRANTY

Measuring Protocol no.: 1

Product designation: LM-M-O-020 WL2221 XA1031
Article/Sample No.: 1
Type of material:

Type of lighting source:
Illuminance on sample: E = 1001 lx
Filename: 9230111.101
Measurement performance:
Date:

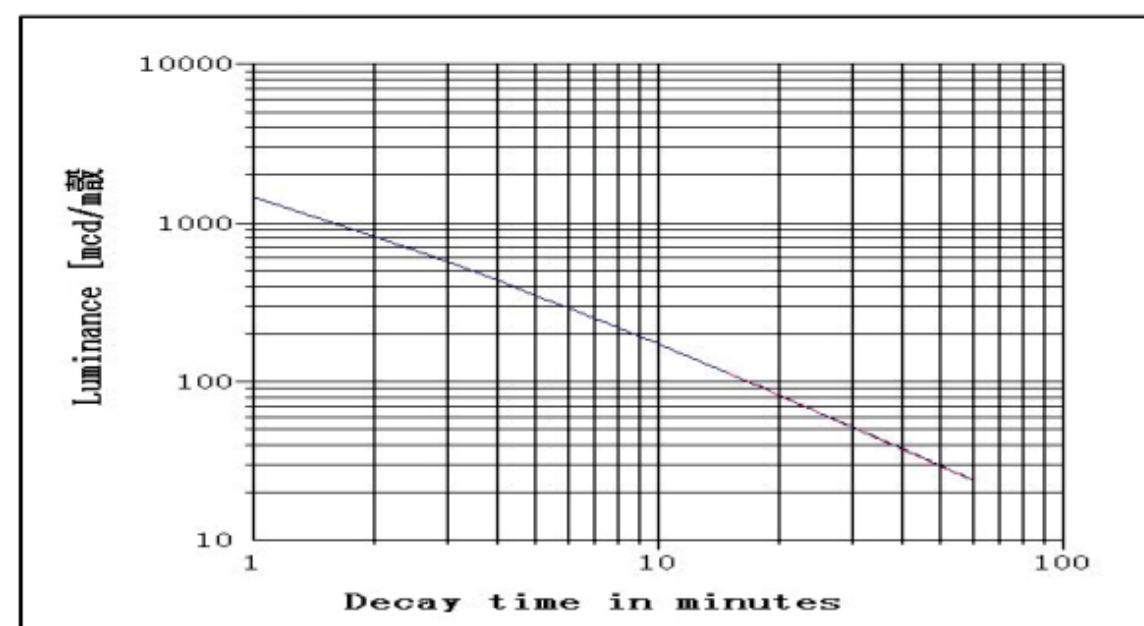
Temperature:
Period of conditioning:
Size of measuring field:
Starttime: 15:18

Measurement according to DIN 67 510 Part 1

Luminance after 2 minutes: 824 mcd/m²
Luminance after 10 minutes: 172.9 mcd/m²
Luminance after 30 minutes: 51.8 mcd/m²
Luminance after 60 minutes: 23.9 mcd/m²
Luminance after 120 minutes: 11.1 mcd/m² evaluated from readings >= 15 minutes
Luminance after 3054 minutes: .3 mcd/m² evaluated from readings >= 15 Minutes (Decay time)

Afterglowing characteristics: 824 / 172.9 / 23.9 - 3054

min	mcd / m ²	m min	mcd / m ²	m min	mcd / m ²	m min	5816	1	1454	2	824
6	290	7	248.6	8	217.7	9	193	10	172.9	11	156.4
12	142.4	13	130.5	14	120.5	15	111.7	16	104.4	17	97.8
18	91.8	19	86.5	20	81.6	21	77.3	22	73.6	23	70.1
24	66.72	25	63.6	26	60.73	27	58.28	28	56.03	29	53.81
30	51.77	31	49.91	32	48.33	33	46.86	34	45.38	35	43.94
36	42.52	37	41.17	38	39.91	39	38.87	40	37.85	41	36.81
42	35.78	43	34.77	44	33.88	45	33.13	46	32.34	47	31.51
48	30.7	49	29.92	50	29.29	51	28.68	52	28.06	53	27.43
54	26.83	55	26.34	56	25.91	57	25.42	58	24.93	59	24.43
60	23.92										



Measuring device: Photometer 06A632 Manufacturer: LMT Lichtmesstechnik GmbH Berlin Type: B 520

SGS

TEST REPORT

No. : DLIN2206001705ML
Date : Jul 15, 2022
Page: 1 of 2



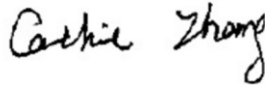
CUSTOMER NAME: DULIGHT SIGNAGE&FLAG MANUFACTURING CO., LTD.
ADDRESS: 330 JINQUAN ROAD JINZHOU DISTRICT DALIAN LIAONING PROVINCE CHINA.

Sample Name : PIPE MARKER
Material and Mark : Polyester

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Date of Receipt : Jun 28, 2022
Testing Start Date : Jun 28, 2022
Testing End Date : Jul 15, 2022
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co.,Ltd. Dalian Branch



cathie_zhang
Authorized signatory

SGS

TEST REPORT

No. : DLIN2206001705ML
Date : Jul 15, 2022
Page: 2 of 2

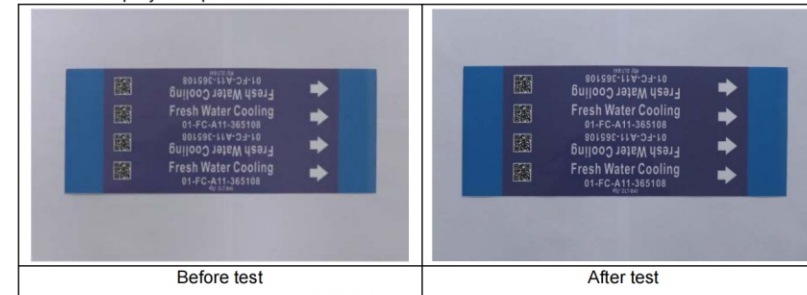
Neutral Salt Spray test: NSS
Test method: DIN EN ISO 9227:2017
Concentration of solution collected: (50±5)g/L NaCl
Chamber temperature: (35±2) °C
Volume of salt solution collected: (1.0~2.0) ml / (80cm²·h)
PH of collected solution at (23±3) °C: 6.5~7.2

Treatment of specimens after test: allow them to dry for 0.5h to 1h before rinsing, clean them in running water (≤40 °C), then dry immediately.

Test result(s):

Sample	Exposure period	Appearance
1#	168h	No visible change

Neutral Salt Spray Test photos:



***** End of report*****

SGS

Test Report

No.: SHAPH22000109001 Date: Jul 08, 2022 Page 1 of 3

Client name : Dulight Signage&Flag Manufacturing Co., LTD.
Client address : 330 Jinquan Road Jinzhou District Dalian Liaoning province China.

Sample Name : PIPE MARKER
Material and Mark : Polyester
The above sample(s) and information were provided by the client.

SGS Job No. : SHPL2207002270PC DLIN2206001703PC
Sample Receiving Date : Jul 04, 2022
Testing Period : Jul 04, 2022 to Jul 08, 2022
Test Requested : Select test(s) as requested by the client.
Test Method(s) : Please refer to next page(s).
Test Result(s) : Please refer to next page(s).

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



Helen Liu
Approved Signatory



SHAPH22000109001



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Test Report

No.: SHAPH22000109001

Date: Jul 08, 2022

Page 2 of 3

Test Results:

Test Part Description:

SN ID.	Sample No.	SGS Sample ID	Description
SN1	1	SHA22-0001090-0001.C001	Colorful solid sheet

Remarks:

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Asbestos

Test Method: With reference to NIOSH 9002:1994, analysis was performed by Polarized light microscope (PLM).

Test Item(s)	CAS No.	Units	MDL	1
Actinolite	77536-66-4	%	0.1	Negative
Amosite	12172-73-5	%	0.1	Negative
Anthophyllite	77536-67-5	%	0.1	Negative
Chrysotile	12001-29-5 /132207-32-0	%	0.1	Negative
Crocidolite	12001-28-4	%	0.1	Negative
Tremolite	77536-68-6	%	0.1	Negative

Notes:

- (1) Negative = the absence of asbestos, Positive = the presence of asbestos.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($\mu=0$) stated in ILAC-G8:09/2019.



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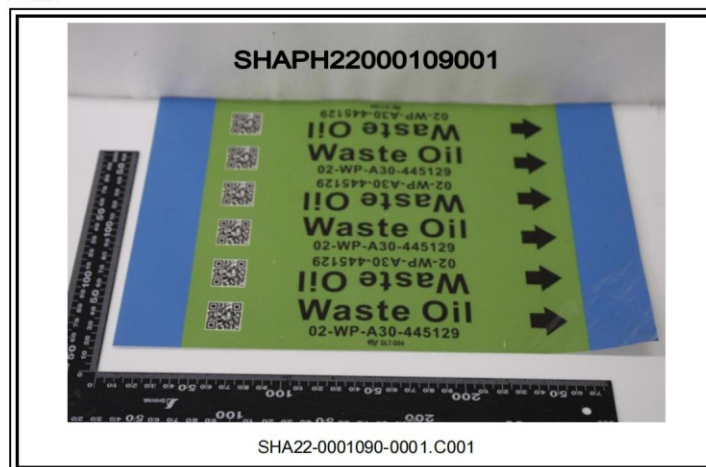
Test Report

No.: SHAPH22000109001

Date: Jul 08, 2022

Page 3 of 3

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***

TEST REPORT

No. : TJMR220700408701

Date : Jul 14, 2022

Page: 1 of 4



CUSTOMER NAME: Dulight Signage&Flag Manufacturing Co., LTD.
ADDRESS: 330 Jinqian Road Jinzhou District Dalian Liaoning province China.

Sample Name : PIPE MARKER
Material & Mark : Polyester

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

SGS Ref. No. : TJPL2207001145PS-DLIN2207001773PS

Date of Receipt : Jul 07, 2022

Testing Start Date : Jul 07, 2022

Testing End Date : Jul 14, 2022

Test result(s) : For further details, please refer to the following page(s)
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Signed for
SGS-CSTC Standards Technical
Services (Tianjin) Co., Ltd.



Jenarry Liu
Authorized signatory



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TEST REPORT

No. : TJMR220700408701

Date : Jul 14, 2022

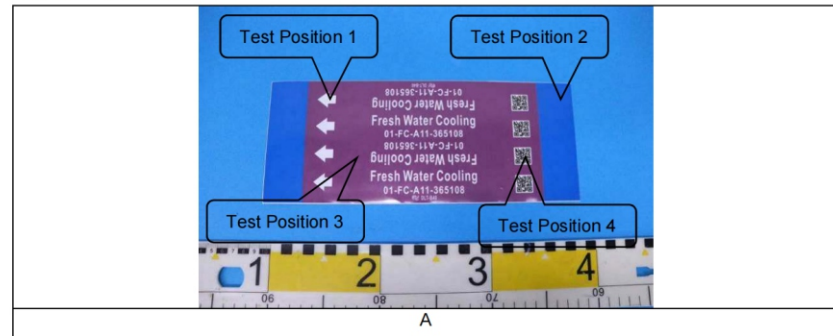
Page: 2 of 4

Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Cold Test	With reference to IEC 60068-2-1:2007 and client's requirement	See result	/

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/ : Not Apply to the judgment.

Original Sample Photo:



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TEST REPORT

No. : TJMR220700408701

Date : Jul 14, 2022

Page: 3 of 4

Test Item: Cold Test

Sample Description: Pipe marker

Test Method: With reference to IEC 60068-2-1:2007 and client's requirement

Test Condition:

Temperature: -45 ℃

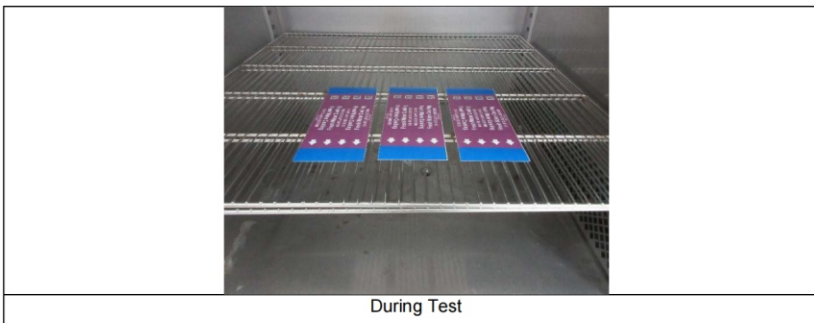
Duration: 10 hours

Test Result:

Sample	Test result
Test Position 1	Grey scale: 4-5, no obvious change in appearance
Test Position 2	Grey scale: 4-5, no obvious change in appearance
Test Position 3	Grey scale: 4-5, no obvious change in appearance
Test Position 4	Grey scale: 4-5, no obvious change in appearance

Note: According to ISO 105-A02:1993/Cor.2:2005, the grey scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.

Test Photo:



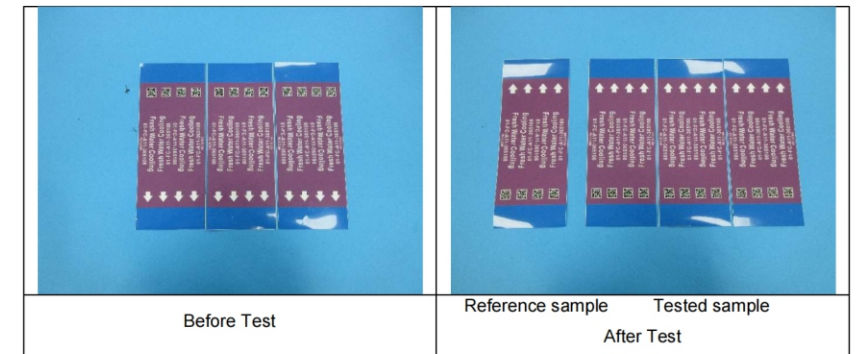
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TEST REPORT

No. : TJMR220700408701

Date : Jul 14, 2022

Page: 4 of 4



Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Temperature and Humidity Chamber	KTHG-715TBS	POL-019	2022-04-06	2023-04-05
Colour Assessment Cabinet	T60B	POL-013	2021-09-09	2022-09-08

Appendix information:

In the territory of the People's Republic of China, the test report without CMA logo expresses the test report shall only be used for client scientific research, teaching, internal quality control, product research and development, etc., and just for client internal reference.

***** End of report*****



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TEST REPORT

No. : TJMR220700391101

Date : Jul 13, 2022

Page: 1 of 5



CUSTOMER NAME: Dulight Signage&Flag Manufacturing Co., LTD.
ADDRESS: 330 Jinquan Road Jinzhou District Dalian Liaoning province China.

Sample Name : PIPE MARKER
Material & Mark : Polyester

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

SGS Ref. No. : TJPL2206001079PS-DLIN2206001704PS

Date of Receipt : Jul 02, 2022

Testing Start Date : Jul 02, 2022

Testing End Date : Jul 13, 2022

Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services (Tianjin) Co., Ltd.



Jenarry Liu
Authorized signatory

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TEST REPORT

No. : TJMR220700391101

Date : Jul 13, 2022

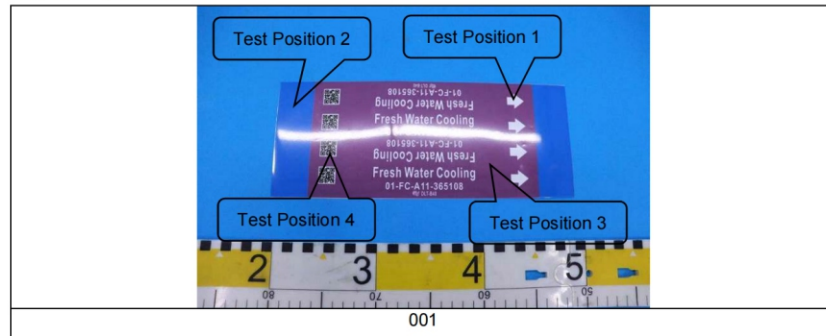
Page: 2 of 5

Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Light Ageing Test-UV Exposure	ASTM G154-16 Cycle 1 & ISO 105-A02:1993/Cor.2:2005	See result	/

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/ : Not Apply to the judgment.

Original Sample Photo:



SGS

TEST REPORT

No. : TJMR220700391101

Date : Jul 13, 2022

Page: 3 of 5

Test Item: Light Ageing Test-UV Exposure

Sample Description: Pipe marker

Test Method: ASTM G154-16 Cycle 1 & ISO 105-A02:1993/Cor.2:2005

Test Condition:

Exposure cycle:

Lamp type: UVA-340

8h UV at (60±3)°C BPT, 0.89W/(m²·nm)@340nm

4h condensation at (50±3)°C BPT

Exposure duration: 168h

Test Result:

Sample	Grey scale	Appearance
Test Position 1	3-4	Visible slight discoloration
Test Position 2	4	Visible slight discoloration
Test Position 3	4	Visible slight discoloration
Test Position 4	4	Visible slight discoloration

Note:

- According to ISO 105-A02:1993/Cor.2:2005, the grey scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.
- The results were carried out within 1 hour after above specified durations for the end of the exposure.



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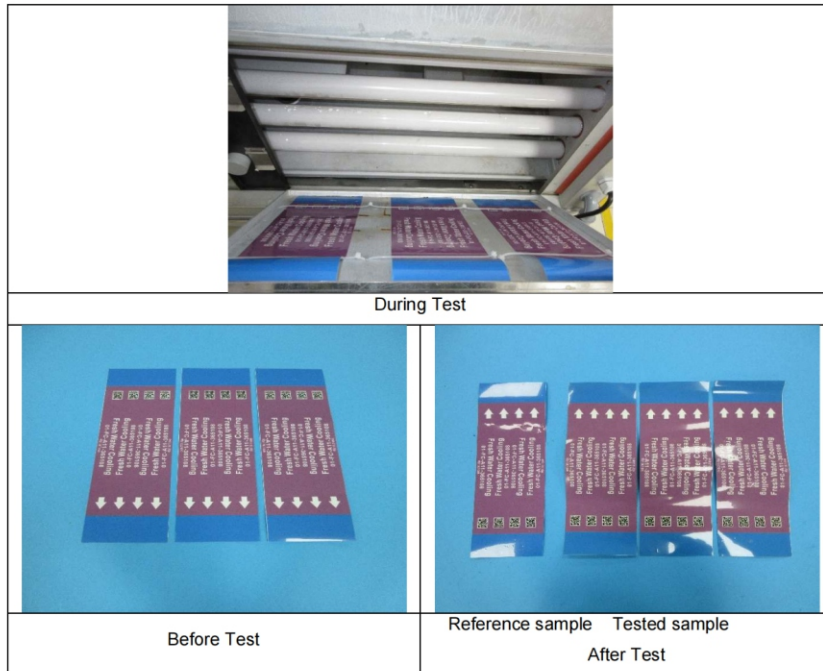
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No. : TJMR220700391101

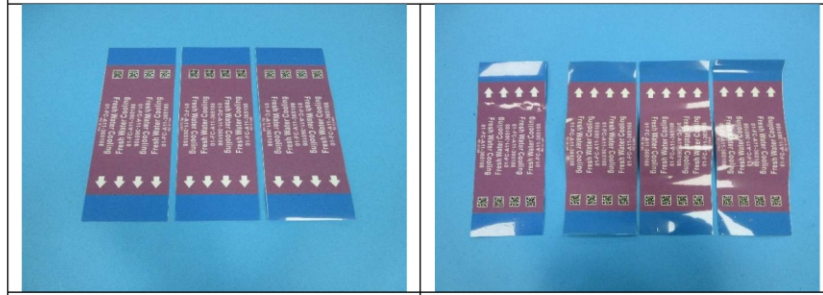
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Page: 4 of 5

Test Photo:



During Test



Before Test

Reference sample Tested sample
After Test

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TEST REPORT

No. : TJMR220700391101

Date : Jul 13, 2022

Page: 5 of 5

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
UV Accelerated Weathering Tester	QUV/se	POL-156	2022-04-13	2023-04-12
Colour Assessment Cabinet	T60B	POL-013	2021-09-09	2022-09-08

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***** End of report*****



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