

# PRODUCT DATA SHEET

Photoluminescent Rigid Sheet—RGB-H

# Realglow

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## **Description :**

Realglow rigid Glow-in-the-Dark sheeting with "High Intensity" luminous properties enclosed in a transparent weatherproof U/V stabilized plastic. Complies with PSPA Class A requirements for safety signs when tested to DIN 67510 Part 1. Meets BS 3757 (1978) when tested in accordance with BS 2782 method 508A.

## **Features :**

With the needs of safety sign producers in mind, the sheets incorporate impact modifier which prevents cracking, edge splitting, and shattering when cutting or drilling the material. The sheets are also able to withstand repeated flexing and a broad temperature range without losing their dimension. The material provides a source of light in total darkness. Highly visible to the human eye in the dark after exposure to natural or artificial light. Gradual diminution of glow intensity over several hours. Rechargeable unlimited times by simple re-exposure to light. Retains luminous powers over an indefinite period during storage and when being used internally. Non-toxic, non-radioactive, contains no lead or phosphorous and presents no health or environmental hazards.

## **Uses :**

Emergency Evacuation, General Safety and Caution Warning. Ideal for signs and escape routes, and for marking exits, stairways, corridors, hallways, directions, firefighting and emergency life-saving equipment, controls and hazards.

## **General applications :**

Suitable for use in ships, oil rigs, power plants, mines, tunnels, sub-ways, civil defence shelters, hotels, motels, hospitals, office buildings, banks, factories, cinemas, theatres, schools, airports, restaurants, garages, warehouses, etc. Wherever the need exists to increase "safety" and evacuation.

## **Color :**

Darkness : Yellow-green

Daylight : Greenish yellow

## **Printing :**

Silk-screen and offset.

**Handling and Cleaning:**

Cutting with conventional equipment; Neutral and non-abrasive cleaners.

**Storage :**

The material should be stored and handled absolutely flat. It may be stored for long periods providing the storage area is clean, dry and above 5 degrees centigrade.

All Realglow high intensity luminous materials have undergone extensive quality control testing to ensure strict adherence to specifications.

**Durability :**

Indoors : Virtually indefinitely

Outdoors : Up to 4 years depending on position and atmospheric conditions

**Luminosity :**

Easily exceeds PSPA Class C readings of

10 minutes : 235mcd/m<sup>2</sup>

30 minutes : 75 mcd/m<sup>2</sup>

60 minutes : 32 mcd/m<sup>2</sup>

Time to decay to 0.3 mcd/m<sup>2</sup> : 3240 minutes

When tested to DIN 67510 - charged at 1000 lux for 5 minutes.

**Physical properties :**

Thickness	1.2mm. Tolerance +or- 10%
Weight	1.70kilos per square meter
Dimensional stability	< 3.0 %
Sheet size(biggest)	1200X1000mm

**Environmental properties :**

Service temperature	-45 degrees C to +80 degrees C
Application temperature	-20 degrees C to +50 degrees C
Fungus resistance	Resistant to fungi
Solvent resistance	Resists petrol (free from aromatics), grease, oil, alkali and acids.
Flammability	Self-extinguishing

Measuring Protocol no.: 1  
 Product designation: RGB-H  
 Article/Sample No.: 1  
 Type of material:  
 Type of lighting source:  
 Illuminance on sample: E = 1002 lx  
 Temperature: 23 癩  
 Filename: TB102101.101  
 Period of conditioning:  
 Measurement performance: Size of measuring field:  
 Date: 2010年10月12日  
 Starttime: 15:07

## Measurement according to DIN 67 510 Part 1

Luminance after 2 minutes: 1473 mcd/m?  
 Luminance after 10 minutes: 302.7 mcd/m?  
 Luminance after 30 minutes: 89.5 mcd/m  
 Luminance after 60 minutes: 39.5 mcd/m  
 Luminance after 120 minutes: 17.9 mcd/m? evaluated from readings >= 15 minutes  
 Luminance after 4103 minutes: .3 mcd/m? evaluated from readings >= 15 Minutes (Decay time)

Afterglowing characteristics: 1473 / 302.7 / 39.5 - 4103

min	mcd / m <sup>2</sup> min	mcd / m <sup>2</sup> min	mcd / m <sup>2</sup> min	mcd / m <sup>2</sup> min	mcd / m <sup>2</sup> min	mcd / m <sup>2</sup> 0	9870	1	2617	2	1473
6	515.1	7	439.9	8	382.8	9	338.3	10	302.7	11	273.4
12	249	13	228.4	14	210.6	15	195.3	16	181.9	17	170.1
18	159.7	19	150.4	20	142	21	134.4	22	127.5	23	121.3
24	115.5	25	110.3	26	105.4	27	101	28	96.9	29	93
30	89.5	31	86.1	32	83	33	80.1	34	77.4	35	74.8
36	72.4	37	70.1	38	68.02	39	65.97	40	64.03	41	62.2
42	60.47	43	58.82	44	57.23	45	55.73	46	54.3	47	52.94
48	51.63	49	50.38	50	49.18	51	48.02	52	46.92	53	45.86
54	44.84	55	43.87	56	42.92	57	42.01	58	41.14	59	40.3
60	39.49										

