

Product name Sharpie LM-1 Multi color

Low modulus, one-component type sealant.
Compatible for joints of Ceramics, metallic sidings and ALC.
Pass JIS A 5758 qualified, F12.5E-8020(MS-1)
※ By mixing 1 optional color paste with 1Can.

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■Advantages

- ◇Excellent weatherability and durability
Resistance to UV, heat, cold, humidity, ozone
High performance shows permanently
- ◇Varieties of colors
More than 400 color selections
- ◇Strong adhesion properties
Improve adhesion with recommended primer

■Application

- Joints of ceramics-sidings
- Joints of metallic-sidings
- Joints of ALC and so on

■Characterization

Product Name	SHARPIE Modified silicone NB-LM
Sealant Classification	JIS A5758 F-12.5E-8020(MS-1) * JIS certification No. CE0508023
Main Component	Special Modified silicone polymer
Consistency : Sealant / Color pase	Pasty / pasty
Mixing ratio	100 : 3.7

Based on JIS A 5758 & JIS A 1439

Viscosity (Pa·s, 10rpm)	23°C	300 ~ 500	Cure Rate	Days of curing skin to 5mm
Density (g / ml)		1.35	5°C, 50%RH	more then 10d
Skin over time (hour)	23°C	4	23°C, 50%RH	approx.2d~3d
Nonvolatile (%)		95.8	50°C, 50%RH	approx.1d~2d
Extrudability (sec.)	23°C	3 ~ 5		
Service Temperature		-20°C ~ 90°C		

Cured property after 23°C*7days

Elastic Recovery (%)	72
50% Tensile Stress	0.15
Tensile Strength (MPa)	0.60
Elongation at break (%)	650
Hardness (Shore A)	13
Cohesion properties at maintained extension	no failure
Cohesion properties after compression heating/tension cooling	no failure
Cohesion properties at maintained extension at Immersion in water	no failure
Durability(8020)	Pass



■ Tensile Properties

Cure condition \ Item	Test condition	50% Tensile stress (N/mm ²)	Maximum tensile stress (N/mm ²)	Elongation at break (%)
After curing	23°C	0.16	0.65	670
After heating (80°C)	23°C	0.16	0.61	570
After immersion in water	23°C	0.11	0.39	630

with primer
P-50
Substrate :
Aluminum

■ Recommend primer

Recommend substrates	Product name	Note
Coated matel, concrete, ALC	SHARPIE Primer P50	Non yellowing aging

■ Paintability

General reference. During primer or paint difference, confirmation request.

Classified	General	Adhesion	Non-stain	
Single layer finish	Acrylic resin lithin	○	○	For waterbase , be aware of water repellency
	Elastic lithin	○	△	
Multi-layer finish	Acrylic silicone	○	△	Adhesion ○:Good △:Normal × :Bad
	Elastic spray lithin (waterproof)	○	△	
Thick layer finish	Synthetic stucco	○	△	Non-stain ◎ : Excellent ○ : Good △ : Slight(not effected)
Waterbase paint		○	△	
Solventbase paint		○	△	
Oilbase paint		×	×	

Do NOT applied on oilbase or phthalic oxidatively-polymerized paint

■ Usage amount

The length(m) of sealant operation per a 4L can

D \ W	10mm	15mm	20mm	25mm	30mm	
10mm	32	21.3	16			Loss rate 20% W: width. D: depth.
15mm			10.67	8.53	7.11	

The length(m) of primer operation per a 500g can

D \ W	10mm	15mm	20mm	25mm	30mm	
10mm	175	175	175			Loss rate 30% W: width. D: depth.
15mm			116	116	116	

Porous surface (concrete): about half length of non-porous surface.

■ Notice

- The surfaces to be bonded must be dry, free of oil, dust , grease and other contaminants.
- NO operation when it rains or snows.
- Before operation, wooden corrosion should be removed.
- CAN NOT operated on asphalt.
- NO application on the surface which contained volatile.
- DO NOT operated too thin.
- CAN NOT adhere to marble and glass.



■Temperature scope of sealant apply

The month of manufacture	Operating temperature	Available (hr)		
		5℃	25℃	35℃
5, 6, 7, 8	Approx. 20 ~35℃	-	2~4	1~2
1, 2, 11, 12	Approx. 5 ~25℃	3~5	1~2	-
3, 4, 9, 10				

■How to use

Please operate the product according to following procedure

- | | |
|--|--|
| ①.Pre-study and preparation | ⑦.Mixing sealant with color paste. |
| ②.Pre-check | *Before mixing, keep off dryer, aluminum sheet and cured sealant in can. |
| ③.Seam/surface dust free and dried | ⑧.Apply |
| ④.Setup holder and accessories | ⑨.Use a spatula to finish the joint. |
| ⑤.Setup the masking tape | ⑩.Remove the masking tape |
| ⑥.Apply primer(primer tack-off time : 30min/20℃) | ⑪.Clear up around |
| | ⑫.Check the operation |

■Attention

- Keep away from heat/sparks/static electricity/open flames/hot surfaces.
No smoking.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid release to the environment.
- IF SWALLOWED: Rinse mouth.
- IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
- IF skin or eye contact occurs immediately flush with water for 15 minutes.
And call a POISON CENTER or doctor/physician.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Keep out of reach of children
- Storage in a dark cold place. Keep away from sunshine.
- Construction and Industrial use ONLY
- See SDS for detailed description.

■Packaging

●Sealant

SHARPIE SEAL LM-1 multi color can-type . . . 4L can x 2pcs/Carton

◇color : optional color paste type of 400colors

●Primer

SHARPIE Primer P-50 . . . 500g /can

★The data above, due to different materials and conditions of application which are beyond our knowledge and control we strongly recommend carrying out sufficient tests in order to ensure that our products are suitable for the intended process and applications. Except for wilful acts any liability based on such recommendations or any oral advice is hereby expressly excluded.



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