

Product name

Sharpie Seal M-2NBMSK2-18
JSIA F☆☆☆☆

High weather resistance. It is stable on many kinds of joints after a long period.

With specific primers, it can adhere many kinds of materials.

Better operating under a low temperature and shift along with the joints in a short period.

Because of using the color paste, it can be adjusted to any kind of colors.

Less contaminating to the surrounding. The adhesion depends on the primer.

**Advantages**

- ◇ Excellent durability & Weatherability
- ◇ Multi-substrates application
- ◇ Stable adhesion with recommended primer
- ◇ Extensive using in high building structure
- ◇ Multicolor selections

Use

- ◇ Joints of metal curtain curtain / wall panel
- ◇ Joints of pre-cast concrete curtain / wall panel
- ◇ Joints of stone-clad pre-cast concrete
- ◇ Joints of tile
- ◇ Joints of building well panel

Characterization

Product name	Sharp Chemical M-2NB
JIS A 5758 qualified	F-25LM-9030 (MS-2) No CE0508023
Shape : base / Hardener / Color pase	Pasty / light yellow liquid / pasty
Mixing ratio	100 : 10 : 4.3

Base On JIS A 5758 & JIS A 1439

Slump (mm)	Longitudinal	5°C	0	Density	g/ml	1.27		
		50°C	0		Extrudability (sec)	5°C	4	
	Lateral	5°C	0			23°C	2	
		50°C	0		Available time (h) <with seasonal selection>	5°C	5	
Elastic Recovery(%)			93	23°C		4		
Tensile Properties 【 M100 】 (N/mm ²)			23°C	0.2		35°C	2	
			-20°C	0.2	Tack-free (h)		23°C	6
Cohesion properties				Loss of volume (%)			6.8	
at maintained extension			No failure	Durability (9030)			Pass	
after compression heating/tension cooling			No failure					
at maintained extension at Immersion in water			No failure					

Tensile Properties

Curing Condition	Test condition	50% tensile stress (N/mm ²)	Maximum tensile stress (N/mm ²)	Elongation at break (%)	With primer P-32 Substrate: Alumimun
After curing	23°C	0.12	0.49	810	
After heating (80°C)	23°C	0.14	0.54	730	
After immersion in water	23°C	0.10	0.43	850	

Recommend primer

Recommand 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	For waterbase , be aware of water repellency
Single layer finish	Acrylic resin lithin	○	◎	
	Elastic lithin	○	◎	
Multi-layer finish	Acrylic silicone	○	◎	Non-stain ○:good(maybe sticky) △slight(not effected)
	Elastic spray lithin (waterproof)	○	◎	
Thick layer finish	Synthetic stucco	○	◎	
Waterbase paint		○	◎	
Solventbase paint		○	◎	
Oilbase paint		×	×	

Do NOT applied on oilbase or phthalic oxidatively-polymerized paint

■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.
- Industrial use ONLY

■How to use

Please apply the product according to the following procedure

- | | |
|--|--|
| ① Pre-study and preparation | ⑧ Load the sealant into a caulking gun |
| ② Pre-check | ⑨ Apply |
| ③ Seam/surface dust free and dried | ⑩ Use a spatula to finish the joint. |
| ④ Setup holder and accessories | ⑪ Remove the masking tape |
| ⑤ Setup the masking tape | ⑫ Clear up around |
| ⑥ Apply primer (primer tack-off time : 30min/20°C) | ⑬ Check the operation |
| ⑦ Base / hardener / color paste mixing | |

■Sealant Operation Temperature Scope

The month of manufacture	Operating temperature	Available (hr)		
		5°C	25°C	35°C
1, 2, 11, 12	5 ~ 20°C	4 ~ 6	2 ~ 4	—
3, 4, 9, 10	10 ~ 30°C	—	2 ~ 4	—
5, 6, 7, 8	20 ~ 35°C		3 ~ 5	1 ~ 2

■Stretch and Shear Rate by standard joints

	Stretch rate		Shear rate		
	M1	M2	M1	M2	
Seal M-2 (Durability 9030)	M1	M2	M1	M2	M1: In temperature condition
	20	30	30	60	M2: Wind / Earthquake / Vibration

■ **Replenish Joint**

First	M-2	PU-2
Second M-2	○	◎

○ : Able to repair / Do former replacement after cut off former glue

M-2 Not in priority

■ **Joint Design**

Design of standard joints (width and depth)

Width Allowable	Min	40mm
	Min	10mm
Depth Allowable	Max	30mm
	Min	10mm

Recommend inject twice while width over 30mm.

■ **Usage amount**

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

D \ W	10mm	15mm	20mm	25mm	30mm	Loss rate 20%
	10mm	32	21	16		
	15mm		10.6	8.5	7.1	D: depth.

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

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

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

■ **Notice**

1. No skin contact with glue, glove as necessary as protection
2. Flame / static caution when primer applying
3. Mask / glasses for protection as necessary
4. High temperature / fire source caution request for primer
5. Wastes handle by contractor
6. Watch by water when eye contact uncautions
7. Drink water and emetic if eaten by mistake
9. Keep away kids reachable
10. The product develop for construction purpose only
11. Please refer to MSDS as detail information

■ **Packaging**

- Selants **Sharpie Seal M-2NB** 4L x2can /carton
 ◇ color paste
- Primer SHARPIE Primer P-32 500g /can
 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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