

THERMOSIN MF600 BLACK

Type of paint Heat resistant modified silicone resin paint for baking

Heat resistant temperature ~600°C

- Features**
1. Suitable for engine muffler because this paint has excellent resistance to rapid heat shock resistance.
 2. One layer coating is enough for excellent properties of moisture resistance, water resistance, and corrosion resistance.
 3. In addition, this paint has resistant to gasoline, oil, and impacts.
 4. Blasting, chemical treatment, solvent degreasing, etc... are selectable for pretreatment. It is depending on base material and operating temperature.

Color

Black (Matte)

Usage

Engine muffler for automobiles, motorcycles, construction machineries, agricultural machineries, ships, etc. Parts and equipment need resistance of heat shock.

Applicable base material

Iron, aluminum casting, aluminum, stainless steel plate, aluminum plated steel plate

Painting specification

Pretreatment : Solvent degreasing,
Blast treatment etc.

Diluent : MF Thinner

Painting : 1 layer coating by air splay
(Electrostatic coating is also applicable)

Baking : 180°C×20min

Standard dry coating thickness : 30±5µm

Paint property

	Item	Content
1	Packing style	4kg · 16kg metal can
2	Mixing ratio	—
3	Specific gravity	1.28
4	Solvent specific gravity	0.85
5	Residue after heating	58%
6	Hazardous substances*	Xylene 30~40% N-butanol 5~10%
7	Type of organic solvent*	Class 2 organic solvent
8	Dangerous goods classification according to the Fire Service Act*	Class 4 No.2 petroleum

*Japanese Low Note) Above are standard values.

Coating properties (Baking at 180°C×20min)

Item	Test method	Result
Luster	60 ° Mirror surface reflectance measuring machine	0.5~1.0G
Pencil hardness	Mitsubishi Uni	2H
Adhesion	1mm squares scotch tape peeling test	100/100
Bending resistance	φ6mm×180 °	Normal
Impact resistance	Dupont method 1/2in×500g×50cm	Normal
Corrosion resistance	5%Salt water splaying test/96h	Normal
Moisture resistance	50°C relative humidity more than 95%/48h	Normal
Water resistance	Water/40°C×120h dipping	Normal
Alkali resistance	0.1N sodium hydroxide solution/ dipping 40°C×3h	No change
Oil resistance	Engine oil (standard item)/dipping 1h	No change
Gasoline resistance	Regular gasoline rubbing test/10 both ways	No change
Acid resistance	0.1N H ₂ SO ₄ /dipping 24h	No change
Heat resistance	After heating 96h each 300°C/600°C, Adhesion test	100/100
Heat shock resistance	After heating 1h each 200°C/400°C/600°C, Rapid cooling 10cycles	Normal

Note) All values other than heat resistance and heat shock resistance are primary physical properties.

Precautions for use

- 1) This paint uses flammable organic solvent, so please handle with care enough.
- 2) Please wear dust-proof goggles and masks to prevent inhaling odors caused from paint, spray mist during painting, gas during baking, etc. and ventilate the work area sufficiently.
- 3) After use, the remaining paint should be closed tightly and store it in cool and dark place.
- 4) Please refer SDS for precaution more details.