

# **TECHNICAL DATA SHEET**

# 9238 (RTV Silicone)

## **One-Component**

# **OVERVIEW**

9238 is RTV Silicone (One-Component) elastomers, cure at room temperature with the moisture in the air. The product bond to most materials, such as metals, ceramics, wood, plastics and glass, with excellent adhesion.

#### **FEATURES & BENEFITS**

- · Good adhesion to most common substrates;
- Neutral cure; no corrosion to the substrates;
- Excellent chemical resistant and weather ability:
- Excellent electrical insulation properties;
- · Easy-to-use one component system;
- Excellent adhesion;
- Excellent high and low temperature resistance; from -50 to 200°C operation.
- Excellent self-extinguished ability.

## **APPLICATIONS**

- The bonding for electrical and electronic appliances;
- · Awater proof adhesion for electrical equipments;
- The adhesion for equipments to keep out water and dust;
- Used for the insulation and shock absorption of equipments;
- The bonding and fixation to the equipments which require cold and heat resistance and flame retardant.

## HANDLING AND SAFETY

- For the uncured products have irritation to the skin and eyes, please do not contact with skin for a long time. Wear safety glasses and protective glove before handling uncured adhesive. Avoid the entry of eyes, in case of the contact, please flush with water for at least 15 minutes immediately; and contact a physician. In case of skin contact please clean with rag and etc. wash thoroughly with soap;
- The substrate surface should be thoroughly cleaned with a suitable solvent such as alcohol, xylene and etc.
   According the substrates variation, use suitable primer if needed;
- Adequate ventilation should be maintained in the working area;
- The product is developed for industrial use only;
- This product releases alcohol vapors as the byproduct of cure.

## TYPICAL PROPERTY DATA

Property	Unit	ASTM	Value	Range
Typical uncured properties  Appearance			W*1	_
Tack-free time (25°C/50%)	min		5	<10
Viscosity (23°C)	CP	6#, 10rpm	210,000	_
Extrusion	G	YSA- CI-H07*2	5	2.0~10
Corrosion (Cu)		MIL-A 46146B	None	_
Typical cured properties we	ek, 25°C/50%	% RH		
Specific gravity	G/ML	D792	1.53	1.45~1.6
Hardness	Shore A	D2240	65	>60
Tensile strength	Мра	D412	2.1	>1.8
Elongation	%	D412	120	>80
Adhesive strength	Mpa (AI)	D1002	2.1	>1.5
Volume resistivity	Ω·cm	D257	1.2×10 <sup>14</sup>	>1013
Dielectric strength	KV/mm	D149	25	>20
Dielectric contant	50Hz	D150	3	2.5~4.0
Dielectric loss	50Hz	D150	0.015	<0.04
D3-D10 content	ppm		<100	_
Shelf life (<25°C)	month		6	_

<sup>\*1</sup>  $\mathbf{W}$  refers white version, while  $\mathbf{G}$  refers grey version;

### **ADHESION PERFORMANCE**

Substrate	Performance	Adhesive Strength (Mpa)
Copper	Excellent	1.8
Aluminum Stainless	Excellent	2.1
Steel	Excellent	2
Brass	Excellent	2
ABS	Excellent	1.8
PET	Excellent	2
PCB	Excellent	1.9
PC	Good	1.1
PE	Poor	0.6
PP	Poor	0.6
Glass	Excellent	2

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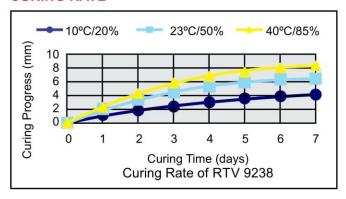




<sup>\*2</sup> is KOOTAI internal standard.



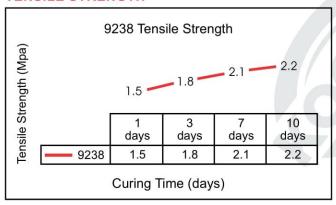
#### **CURING RATE**



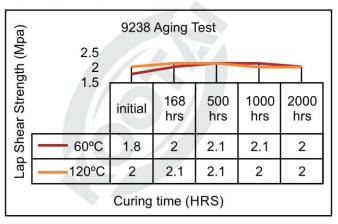
#### **CURING SPEED**

Curing Condition	1 days	2 days	3 days	4 days	5 days	6 days	7 days
10°C / 20%	1.1mm	1.8mm	2.4mm	3mm	3.5mm	3.9mm	4.1mm
23°C / 50%	2mm	3.4mm	4.4mm	5.3mm	5.9mm	6.3mm	6.5mm
40°C / 85%	2.3mm	4.3mm	5.9mm	6.9mm	7.6mm	8.1mm	8.4mm

#### TENSILE STRENGTH



## **TENSILE STRENGTH**



# **SOAKED (WATER) TEST**

Condition	Dielectric Strength (KV/mm)	Volume resistivity (Ω ·cm)	Surface resistivity (Ω ·cm)
Initial	25.5	1.2x10 <sup>14</sup>	1.3x10 <sup>13</sup>
Soaked 16 hours	24.8	1.0x10 <sup>14</sup>	1.6x10 <sup>13</sup>

## PACKAGING SPECIFICATIONS

50ML, 100ML, 300ML, 2600ML & 300KG per drum, 'or' special packaging according to customer's requirements.

#### **STORAGE**

- Please store the products in a cool and dry place, avoid direct sunlight.
- · Please keep out of the reach of children.
- Shelf life is 6 months.

## PRODUCT INDENTIFICATIONS

Through ID, we indentify our products. Here is the encoding rules.

Item	Formula Code	Tack-Free Time	Specific Gravity	Color
ID	10ZH	5	153	W

• W=White, B=Black, C=Crystal, G=Gray.

## **OTHER INFORMATIONS**

The data provided in this sheet are measured under certain conditions, in the different environment, there will be slightly different. **KOOTAI** advise user do application testing before use



