



NANO COAT GD51

- Material**

Material No.	SNS354
EN Symbol (short)	-
AISI/SAE	-
UNS	-
ASTM	-
B.S.	-
Alloy	-
Registered Works Label	-
Standards	-

- Specifications**

NANO Coat floor 51 is a nanometric coating composed of a mixture of ceramic oxides, polysilicates and silani in an alcoholic solution, it is presented in transparent and colorless liquid form. Once applied, in weights of 2 to 10 microns, it becomes a flexible hard adhesive film (shiny or opaque) with hardness over 9H. the complete hardening takes place under environmental conditions (20 degrees C) with good ventilation, in three days, but after only three hours it is pedestrian or hard to the touch.

Applied to supports that can be heated to 130/150 degrees C the hardening takes place in 30 minutes

The once hardened coating has shock resistance to moisture scratches and is impervious to water. resists alkali and solvent acids (acetone, methanol, toluene, hydrocarbons) resists high and low temperatures is not flammable and is antibacterial.

the surfaces on which it is applied peresente greater non-slip characteristics even on wet and antispotation as they are more easily cleanable thanks to the complete saturation of microporosity to its idorforbicity that makes it igenized and not subject to the proliferation of bacteria, fungi or mold.

you can apply to sprays using special guns or tampon after preparation and perfect cleaning and degreasing of the supports

The figures in this datasheet are guide values. The values are affected by processing conditions, modifications, additives and environmental conditions and they do not release you from the obligation to check the validity and to undertake tests on your own. The information given is based on our state of knowledge. The material data is not to be construed as guaranteeing specific properties and the data can not be used to deduce the suitability for a particular application.

Base material: SNS354 (grinded) according to JIS K4700-1-4 Cure time/ condition: 3 days or more after coating operation at ambient temperature

Test Item	Test Method Description	Result/ Value
Thickness	JIS K5600-1-7	4 μ m
Pencil hardness	JIS K5600-5-4 Scratch harness 45degree angle/ 750g load	>9H
Anti-scratch	Steel wool test #0000, 1kg load x 100 times reciprocation	No scratch
Adhesivity	JIS K5600-5-6 Cross cut method 100boxes with 1mm square, Scotch tape peeling	100/100
Impact resistance	JIS K5600-5-3 Weight Drop Test (Dupont method) Drop 500g weight from 30cm high, t=0.6mm	Normal
Flexibility	JIS K5600-5-1 Bending Test Equipment (Type 1) 6mm Dia, t=0.3mm	Normal
Water resistance	JIS K5600-6-2 1) impregnation in hot water (50), 2) 2hours in hot water(80), 3) boiled in 30 min	Normal >9H 100/100
Moisture resistance	JIS K5600-7-3 50 x 98% humidity x 240 hours	Normal
Acid resistance	JIS K5600-6-1 Dropping method 5% sulfuric acid water solution for 24 hours	Normal
Alkali resistance	JIS K5600-6-1 Saturated solution of calcium hydroxide, 24 hours	Normal
Solvent resistance	JIS K5600-6-1 Bomb test: 50 for 10min, Solvent: Acetone/Methanol/Toluene	Normal E=0.5 or less
Anti-rubbing	Rubbing Test: 500g load x 100 times reciprocation, Solvent: Acetone/Methanol/Toluene	Normal
Test Item	Test Method Description	Result/ Value
Heat resistance	JIS K5600-6-3: 80 x 200hours	Normal, E=0.5 or less
Low temp resistance	-18 x 72 hours	Normal
Temp cycle test	[1 cycle = 80 x 2 hrs \rightarrow -18 x 2 hrs] 10 cycles	Normal ^=0.5 or less, >95%
Accelerated weathering test	I-Super UV Test 100mW, 60 , 70%RH, 200hours	Normal
Flammability	Combusted by gas burner (approx 1,000)	Nonflammable
Anti-staining	Wipe with solvent after contacting to contaminated material for 24hours at 20 , Permanent marker Black/Red color, Visible Check	Normal
Salt spray test	K5621 General Test for Anticorrosive Paint Sodium chloride solution, 96hours impregnation	Normal
Ohmic resistance at surface	JIS K691 1 Test for Thermo-set Plastic Ordinary state (C-96/20/65), DC500V, PC plate)	10 ¹² ohm