Innovation for Customers

Product Data Sheet

Adhesive for Cryogenic Applications

NITOFIX SK-229

1. Outline

"NITOFIX SK-229" is two-pack curing type adhesive for cryogenic applications mainly consisting of epoxy resins.

2. Properties

Item	Color phase	Viscosity (at 20℃)	Specific gravity (at 20℃)	Appearance
Base resin	Blue	100 Pa･s	1.4	 Standard packing: 1kg can each
Curing agent	Yellow	100 Pa･s	1.3	
Compound (Base/Agent =1/1)	Green	100 Pa･s	1.4	

Viscosity measuring condition: BROOKFIELD viscometer; Rotor: No. 4; Rotation speed: 5 rpm

3. Features

- ･Excellent adhesion available at a wide range of temperatures from cryogenic to room temperature
- ･Excellent heat-shock resistance
- ･Excellent adhesion to steel plate, plywood, plastic, etc.
- ･Appropriate viscosity ensures high workability; there is no drop or leakage during operation.

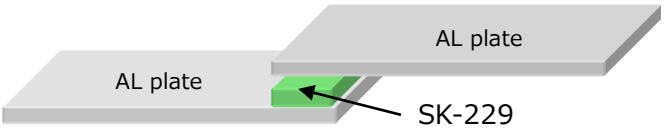
4. Use

- ･To bond superconducting coil wire
- ･To fix/bond heat insulating materials for LNG/LPG tanks and heat exchangers
- ･To bond FRP, aluminum, rubber, plastic, etc.

5. Characteristics(Shear adhesion)

Item	Unit	-165℃	- 50℃	RT	60℃	80℃	100℃	Heat Cycle(10 cycles at 25℃) -196℃; 30sec+25℃; 10min
Shear strength	MPa	16.2	26.0	16.4	10.6	3.8	1.9	16.7

- ･Adherend: AL plate 2 mmt × 25 mm × 100 mm (Polish the surface with #120 sandpaper and then remove oil with acetone.)
- ･Adhesive coating size: 0.6 mmt × 25 mm × 12.5 mm
- ･Curing condition: 20℃× 24 hr or 100℃ × 1 hr
- ･Measuring condition: Tensile speed: 5 mm/min



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