

Technical Data Sheet

Threebond 2215

One-component heat-curing epoxy compound resin

1. Overview

Threebond 2215 is a heat-curable, one-component epoxy resin. It has heat resistance and electrical insulation properties. It is also suitable for applications such as gluing and fixing electronic components

*Here in, ThreeBond will be abbreviated as TB

2. Features

- One-component heat-curing adhesive
- Low temperature curing

3. Recommended Applications

- Adhesion and fixation of sensor parts
- Bonding and fixing the coil
- Other general bonding application

4. Characteristics

4.1. Uncured Properties

Properties	Unit	Value	Testing Method	Remarks
Appearance	-	Black	3TS-2100-002	-
Density	-	1.39	3TS-2500-002	25°C
Viscosity	-	81	3TS-2F00-002	BH type rotational viscometer 25°C N.7 rotor, 20rpm

4.2. Viscosity Chart

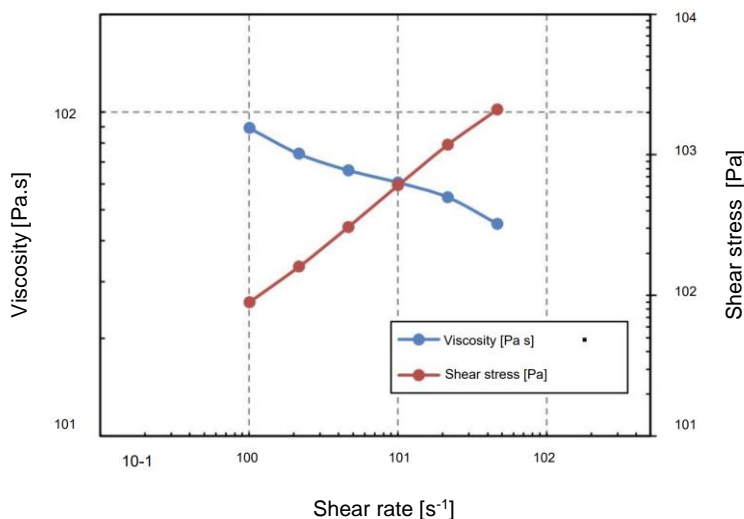


Fig. 01 – TB2215 Flow curve

- Measuring temp.: 25°C
- Measuring method: 3TS-4200-001
- Measuring device: HAAKE MARS-III
- Measuring head: C35/2

Technical Data Sheet

Threebond 2215

One-component heat-curing epoxy compound resin

4. Characteristics

4.2. Temperature and Viscosity Chart

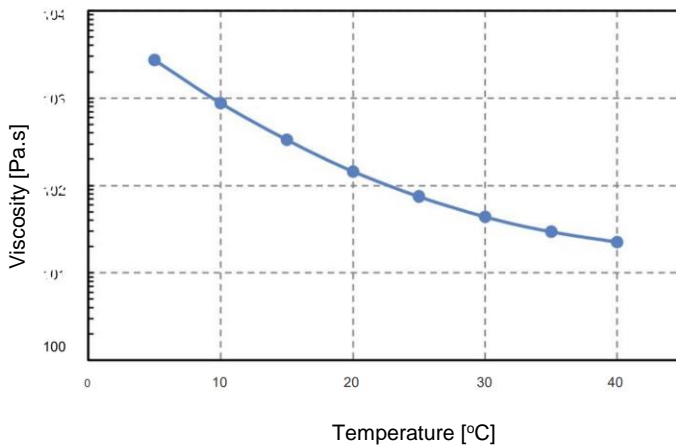


Fig. 02 – TB2215 Temperature and viscosity curve

- Shear rate: 1.0 [s⁻¹]
- Measuring method: 3TS-4200-003
- Measuring device: HOOK MARS-III
- Measuring head: C35/2

5. Typical Properties

5.1. Cured Properties

Properties	Unit	Value	Testing Method	Remarks
Hardness	-	D88	3TS-2B00-004	Durometer D type
Tensile shear strength	MPa	12.0	3TS-4100-011	Fe/Fe (SPCC-SD)
		4.0		SUS304
T-type peel strength	kN/m	0.3	3TS-4130-021	Fe/Fe (SPCC-SD)
		0.07		A1050P
Storage modulus	GPa	7.8	3TS-4730-001	25°C
Loss modulus (E) peak	°C	75		DMA 1Hz
Loss tangent (tan) peak	°C	89		DMA 1Hz
Glass transition temperature	°C	96	3TS-4740-001	-
Coefficient of Thermal Expansion (α1)	X10 ⁻⁶ /°C	45		-
Coefficient of Thermal Expansion (α2)		162		-

Curing conditions: 90°C @30mins

Technical Data Sheet

Threebond 2215

One-component heat-curing epoxy compound resin

5. Typical Properties

5.2. Cured Properties

Properties	Unit	Value	Testing Method	Remarks
Volume resistivity	$\Omega \cdot m$	1.9×10^{13}	3TS-5200-001	-
Surface resistance	Ω	1.7×10^{16}	3TS-5200-002	-
Dielectric breakdown strength	kV/mm	26.3	-	-
Dielectric constant	-	4.6	3TS-5520-001	1MHz
Dissipation tangent	-	0.013		

Curing conditions: 90°C @30mins

6. Direction of use

- To prevent condensation, allow the product to reach room temperature before opening and using it.
- Ensure the application surface is free from dust, oil, and other contaminants by cleaning it thoroughly.
- Curing conditions may vary based on the heat capacity of the adherend, surrounding components, and application method. Always test with actual parts to determine the optimal curing conditions.

7. Precautions

- Ensure the product is suitable for the intended use before application.
- Store in a refrigerator (5–10°C) to prevent filler settling and resin thickening. Allow it to return to room temperature before opening to avoid condensation, which may lead to gelation. Use promptly after opening.
- Product quality may vary depending on the material. Test in advance and discontinue use if issues arise.
- The curing process generates heat when heated—handle with care to avoid burns.
- Slight color variations may occur due to resin characteristics.
- Avoid direct contact and inhalation, as it may be harmful.
- Wear protective equipment (mask, glasses, non-penetrating gloves) and work in a well-ventilated area or outdoors.
- If swallowed, do not induce vomiting. Rinse your mouth and seek immediate medical attention.
- In case of eye contact, rinse thoroughly with clean water and seek medical treatment.
- If the product contacts your skin, wipe it off with a cloth and wash with soap.
- If you experience any abnormal reactions, discontinue use and seek medical attention.
- Do not use if you have allergies or sensitive skin.
- While not classified as hazardous under the Fire Service Act, handle with fire safety precautions.
- Store out of reach of infants and children.
- For hazard details, refer to the safety data sheet (SDS).

Technical Data Sheet

Threebond 2215

One-component heat-curing epoxy compound resin

8. Storage Method

- Store the product in a sealed container to prevent deterioration and contamination.
- Keep it in a dark indoor location with low humidity (5–10°C), away from fire, heat sources, and direct sunlight.

9. Disposal Method

- Dispose of empty containers and product waste as industrial waste through a licensed industrial waste disposal service approved by the relevant prefectural governor.

10. Regulations

- Fire Service Act: Non-hazardous material.

11. Caution

For Industrial Use Only (Do not use for household purposes)

This product is developed for general industrial applications. Please acknowledge the following points before use:

- The technical data provided in this document are based on our company's standardized test methods and are for reference only; they are not guaranteed values. Additionally, we do not guarantee that the applications introduced in this document do not infringe on any intellectual property rights.
- Before using this product, please verify its suitability and safety for your intended application. You are responsible for any associated risks or liabilities.
- This product must not be used for medical implants or applications where it may remain inside the human body.
- We are not liable for any damage or injury caused by improper handling of the product.
- If you are unsure about the nature or proper usage of the product, do not use it.
- For detailed safety information, refer to the Safety Data Sheet (SDS). For inquiries regarding SDS availability, please contact our sales office or customer consultation desk.
- The contents of this document are subject to change at our company's discretion.

12. Registered Trademarks

ThreeBond and スリーボンド (ThreeBond in Japanese) are trademarks or registered trademarks of ThreeBond Co., Ltd.