

DESCRIPTION

TECHNO FIX 553-15 is a two-component, 100% solids, highly thixotropic epoxy putty specially designed for filling, shaping, and repairing precision jigs, particularly in the aerospace, space, and high-tech industrial sectors. Its high static thixotropy level prevents sagging or dripping, even on vertical surfaces, while allowing easy application using 450 ml cartridges (2:1 by volume).

The system cures at room temperature within 2–3 hours at 22 °C, depending on the applied volume, forming a dense, stable, and machinable mass. It offers excellent adhesion to various substrates, including composites, aluminum, alloys, and certain engineering plastics.

This product is ideal for filling precision jigs, structural fairing on composite or metal parts, repairs and adjustments on tooling, supporting the mounting of assembly components, as well as partial encapsulation or positioning of technical components.

PRODUCT ADVANTAGES

- Highly thixotropic: does not sag, even on vertical surfaces or in thick layers up to ≥ 1 inch.
- Excellent dimensional stability after curing.
- Outstanding compressive structural strength.
- Strong adhesion to multiple materials used in aerospace (aluminum, composites, engineering plastics, etc.).
- Machinable (drilling, milling, threading) without cracking or chipping. Can be sanded
- Fast curing.
- Near-zero shrinkage.
- Compatible with subsequent painting, coating, or bonding.
- Can be used as a filler, repair putty, or for securing localized anchors.

APPLICATION INSTRUCTIONS

Measure **2 parts of A and 1 part of B by volume, or 100 parts of A to 45 parts of B by weight**, and mix thoroughly until a uniform color is achieved.

Take care to minimize air entrapment during mixing. Using a good release agent such as our **TECHNO RELEASE 113** will facilitate demolding, if required. Uncured material can be cleaned with our eco-friendly cleaner, POLY CLEANER™.

Contact **POLYMÈRES TECHNOLOGIES** for further information.

TYPICAL PROPERTIES (at 22°C)				
		PART A	PART B	MIXED
Viscosity		Homogeneous paste	Thixotropic paste	Thixotropic paste
Specific Gravity	g/cm ³	1.14 gr/cm ³	1.01 gr/cm ³	1.10 gr/cm ³
Mixing Ratio	1. By volume	2A	1B	2A/1B
	2. By weight	100A	45B	100A/45B
Color		White	Black	Gray
Pot Life	22 °C	30 minutes (200-gram mass).		
Cure Time	22 °C,	2 à 3 heures à selon la masse		
		2 to 3 hours depending on the mass		
Full Cure ¹	22 °C,	~8 hours		

PHYSICAL PROPERTIES (at 22°C)			
TEST	METHOD	RESULTS	
Hardness	ASTM D-2240	SHORE D	83
Tensile Strength	ASTM D-638	MPa ²	30.5
Elongation at Break	ASTM D-638	%	14.8
Sag Resistance	Visual	INCH	1
Linear Shrinkage	ASTM D2566-79	CM/CM	38
Compressive Strength	ASTM D-695	MPA	38

AVAILABLE SIZES: 450 ML CARTRIDGES AND 56.7 L CONTAINERS

¹ À 22°C

² MPa = 145 lbs/po²

PRECAUTIONS

Avoid any application or processing at ambient temperatures above 30°C, as this can alter the exothermic curing profile, cause uncontrolled acceleration of polymerization, and lead to partial or total loss of the system's thixotropic properties. We recommend validating the product, application, and results according to the environment.

- Consult the Safety Data Sheet before use.
- Handle this product following standard safety rules and measures.
- Ensure proper ventilation.
- Wear gloves, safety goggles, and protective clothing.
- Do not use Part A without Part B and vice versa. Once the container is opened, POLYMÈRES TECHNOLOGIES no longer has control or responsibility over this product.
- The product shelf life in unopened original containers is one (1) year from the purchase date, under recommended storage conditions.
- Protect from freezing.

It is recommended to follow provincial and federal safety regulations. In case of eye contact, rinse thoroughly with water and seek medical attention immediately. In case of skin contact, wash thoroughly with water and soap. Keep out of reach of children.

WARRANTIES

The customer acknowledges and agrees that they assume full responsibility for the results obtained from the use of **POLYMÈRES TECHNOLOGIES** products, including, but not limited to, the use of the entire product range and all associated processes. This responsibility applies both to the effectiveness and performance of the products, whether successful or not. This provision remains valid regardless of any information, statement, or recommendation—whether verbal or written—provided by **POLYMÈRES TECHNOLOGIES**, its representatives, or technical advisors. It is exclusively the customer's responsibility to conduct all necessary verifications to ensure that the products supplied by **POLYMÈRES TECHNOLOGIES** are adequate and compatible with their processes, as well as appropriate for the specific applications intended. **POLYMÈRES TECHNOLOGIES** cannot be held liable for any inadequacy or failure resulting from unvalidated or improper use of the products.