

TECHNICAL DATA SHEET

Description

SATTO SA20-21 is a two-part compound for repairing monolithic plastics in aircraft interiors. The easily mixed product cures at room temperature in 30 minutes. Repairs carried out using **SATTO SA20-21** are fast, ultra-strong and long lasting. Following our clear instructions, repairs can be carried out on-wing or in a workshop — no need for specialised tools or lengthy technician training.

Key Features

- Mixes to a paste
- High temperature and chemical resistance
- Resistant to water
- Gap/crack filling
- Mouldable and flexible
- Cures at room temperature

Typical Properties as received

	Part A – Liquid	Part B – Powder	SATTO solution
Colour	Clear	White/grey *	White/grey *
Cure Time	-	-	30 mins
Shelf life @ 25°C unopened, months	12	12	-
Storage conditions	Out of direct sunlight. Dry.	Dry	n/a

* White/grey as standard. Can be colour matched to requirements.

Handling

SATTO® SA20-21 comes in ready prepared and measured clip packs. Grind out the damaged area. Remove dust. Remove the separating strip (clip) from the pack. Mix both parts thoroughly within the pack for several minutes to ensure the powder is dissolved and to assure complete blending. Cut the corner of the pack and apply to the damaged area.

SATTO® SA20-21 cures in 30 minutes at 25°C or room temperature. Once SATTO® SA20-21 has cured; it can be sanded and painted without difficulty.

Smoke and Toxicity Testing

F9	SMOKE EMISSION ABD0031 IssF	Ds Max in 4 min.						PASS
		(Flaming)	206.55	186.16	128.39	173.70	200	
		(Non-Flaming)					200	
F10	TOXIC GAS EMISSION (ppm) ABD0031 IssF	CO (Flaming)	716	722	710	716	1000	PASS
		CO (Non-Flaming)						
		HCN (Flaming)	5	7		6	150	
		HCN (Non-Flaming)						
		HF (Flaming)	<2	<2			100	
		HF (Non-Flaming)						
		HCl (Flaming)	<2	<2			150	
		HCl (Non-Flaming)						
		SO ₂ (Flaming)	<1	<1			100	
		SO ₂ (Non-Flaming)						
NO ₂ (Flaming)	3	2		3	100			
NO ₂ (Non-Flaming)								

Source: AIM Composites Fire Test Report L13430

Tensile Shear Tests

SATTO® SA20-21 has been tested by FIRA for tensile shear strength. 4 tests were carried out under differing pressures and joints. The average results (of ten samples for each test) are shown below:

Material	Bonding material	Type of joint	Pressure at cure	Failure Force N (Mean)	Tensile Strength (Mean) Nmm ²
Kydex 1mm sheet	SATTO 20-21 white	Lap joint	2 bar pressure	1365	7.58
Kydex 1mm sheet	SATTO 20-21 grey	Lap joint	Normal atmospheric	1385	7.7
Kydex 1mm sheet	SATTO 20-21 white	Butt + lap with 20 th doubler	2 bar pressure	732	2.81
Kydex 1mm sheet	SATTO 20-21 grey	Butt + lap with 20 th doubler	Normal atmospheric	582	2.75

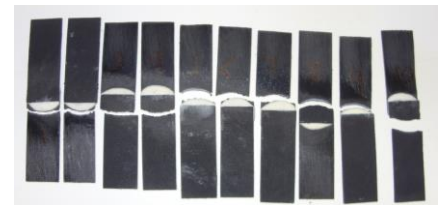
Source: FIRA Technical Reports TCMCF51276, 51277, 51278 & 51279

In every sample, SATTO® SA20-21 proved to be stronger than the surrounding substrate

Vertical Burns Testing

Results of 60 second Vertical Burns Test: CS-25.853 APP F Part 1a 1 (i)

- Flame Temperature $\geq 843^{\circ}\text{C}$
- Max Average flame/glow time: 15 seconds
- Max flaming drip time: 3 seconds
- Max burn length: 6"
- Conditioning: 24 hours @ $21.11^{\circ}\text{C} \pm 3^{\circ}\text{C}$ & $50\% \text{ RH} \pm 5\%$



SATTO® SA20-21 Repair – Single joint

Specimen	Burn Length (ins)	Flame/Glow Time	Drip Time
1	3.0	2.0	0.0
2	3.0	2.0	0.0
3	3.0	1.0	0.0
Average	3.0	1.7	0.0

SATTO® SA20-21 Repair – with Doubler

Specimen	Burn Length (ins)	Flame/Glow Time	Drip Time
1	3.5	3.0	0.0
2	3.5	1.0	0.0
3	3.5	3.0	0.0
Average	3.5	2.3	0.0

Source: Chiltern Burn Testing Services – Test Certificates 1816 and 817

Laboratories

Complete test results sheets with reports are available for easy download on www.satto.aero

Tests were carried out by:

FIRA
Maxwell Road
Stevenage
Herts SG1 2EW
UK
(Lap-shear testing)

AIM Composites
Pembroke Ave
Waterbeach
Cambs. CB25 9QR
UK
(Smoke and toxicity testing)

Chiltern Burn Testing Services
The Test Laboratories
6 Phoenix Business Centre
Higham Road
Chesham, Bucks HP5 2AF
(Burns testing)

CAUTION

MIX 14 Ltd and SATTO Solutions (Distributor) maintain up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material. Copies of the latest MSDS may be downloaded from www.satto.aero or emailing your request to sales@satto.aero

FIRST AID

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Inhalation: Remove subject to fresh air. Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

KEEP OUT OF REACH OF CHILDREN FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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