

TECHNICAL DATA SHEET

Description

SATTO® SA30-40 is a two-part compound for repairing composite components in aircraft interiors. The easily mixed product cures at room temperature in 60 minutes. Repairs carried out using SA30-40 are fast, ultra-strong and long lasting. Following clear instructions set out in the KNSI Repair Accomplishment Document 14K273-RAD0001-0.R repairs can be carried out on-wing or in a workshop.

Key Features

- Available in sem kit injection form
- 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	Mixed solution
Colour	Clear	White	Off-white
Cure Time	-	-	60 mins
Shelf life @ 25°C unopened, months	12	12	-
Storage conditions	Out of direct sunlight. Dry.	Dry	n/a

Handling

SATTO® SA30-40 comes in ready prepared and measured sem kits. Use the sem kit injection system to mix the resin. Place the mixed resin kit in a hand or air powered sem gun and inject the resin into the prepared area ensuring that all voids are filled.

SATTO® SA30-40 cures in 60 minutes at 25°C or room temperature. Once SATTO® SA30-40 has cured; it can be sanded, profiled and painted without difficulty.

Smoke and Toxicity Testing

Test	Specification	Result 1	Result 2	Result 3	Mean	Criteria	Pass/Fail	
F9	SMOKE EMISSION Ds Max in 4 min.						PASS	
	CS25.853(d) Amdt 17 App F Pt.V(a)+(b)	(Flaming) 91.65	(Flaming) 77.66	(Flaming) 104.14	(Flaming) 91.15	200		
F10	CO (Flaming)	173	175		174	1000	PASS	
	CO (Non-Flaming)							
	HCN (Flaming)	1	1		1	150		
	HCN (Non-Flaming)							
	HF (Flaming)	1.5	1.5		2	100		
	TOXIC GAS EMISSION HF (Non-Flaming)							
	(ppm)	HCl (Flaming)	2	2		2		150
	ABD0031 IssF	HCl (Non-Flaming)						
	SO ₂ (Flaming)	1	1		1	100		
	SO ₂ (Non-Flaming)							
NO ₂ (Flaming)	1	1		1	100			
NO ₂ (Non-Flaming)								

Source: AIM Composites Fire Test Report FST32017

Tensile Shear Tests

SATTO® SA30-40 has been tested by Mix 14 for tensile shear strength. 4 tests were carried out under differing pressures and joins. The average results (of ten samples for each test) are shown below:

Material	Test 1	Test 2	Test 3	Test 4	Test 5	Mean
SA30-40	1260N	1613N	1646N	1613N	1478N	1522N

Source: Mix 14 Technical Reports 14GT160601

In every sample, SATTO® SA30-40 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 Products	with	Test Length (seconds)	Flame (seconds)	Drip Flame (seconds)	Burn length (inches)	Test Certificate
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, HSH1083	60	1.3	0	0.2	W60000025
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, Jet Flex 09003-3-3, CM0110845, CM0981520	60	0.3	0	0.2	W60000024
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, Mapaero FR45, FRS40, 1500FR	60	2.3	0	0.2	W60000023
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, Mankiewicz FST-346-57	60	1	0	0.2	W60000022
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, Aertrim LW/18440	60	1.3	0	0.2	W60000021
SA30-40, SA30-40, SA10-10-7781	HD Nomex Core, Phenolic Glass, AF444, Aefilm LHR/12463	60	2.3	0	0.2	W60000020
SA30-40, SA30-40, SA10-10-7781	Nomex Core, Phenolic Glass, AF444, Aefilm LHR/12463	60	1	0	0.2	W60000019
SA30-40, SA30-40, SA10-10-7781	Nomex Core, Phenolic Glass, AF444, Aertrim LW/18440	60	1.7	0	0.2	W60000018
Maximums			15	3	6	

Laboratories

Complete test results sheets with reports are available for easy download on www.satto.aero
Tests were carried out by:

Mix 14 Ltd
Unit 16 Shaftesbury Ind Est
Icknield Way
Letchworth
Herts SG6 1HE. UK

AIM Composites
Pembroke Ave
Waterbeach
Cams. CB25 9QR
UK

CAUTION

MIX 14 Ltd and SATTO Solutions (Distributor) maintain up-to-date Material Safety Data Sheets (MSDS) on all of their 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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