

Supplementary information

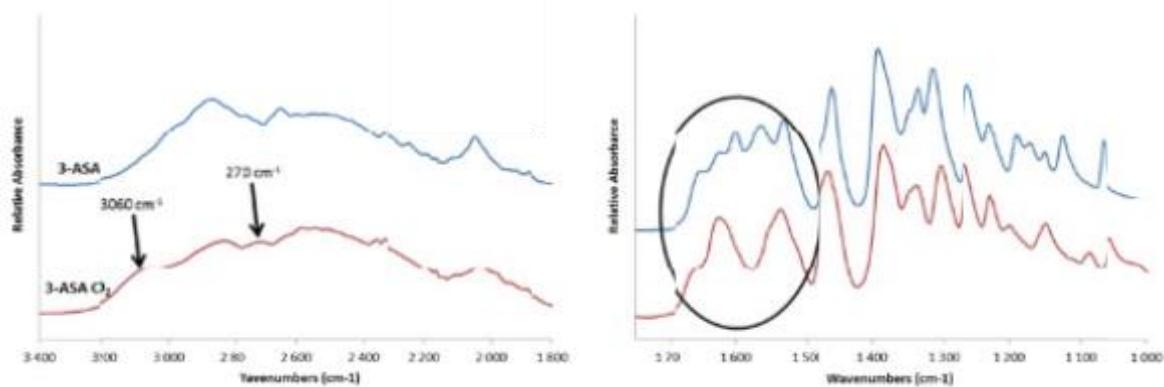


Fig. S1. ATR-FTIR spectra of raw 3-ASA and CO₂ recrystallized 3-ASA. Main differences are highlighted.

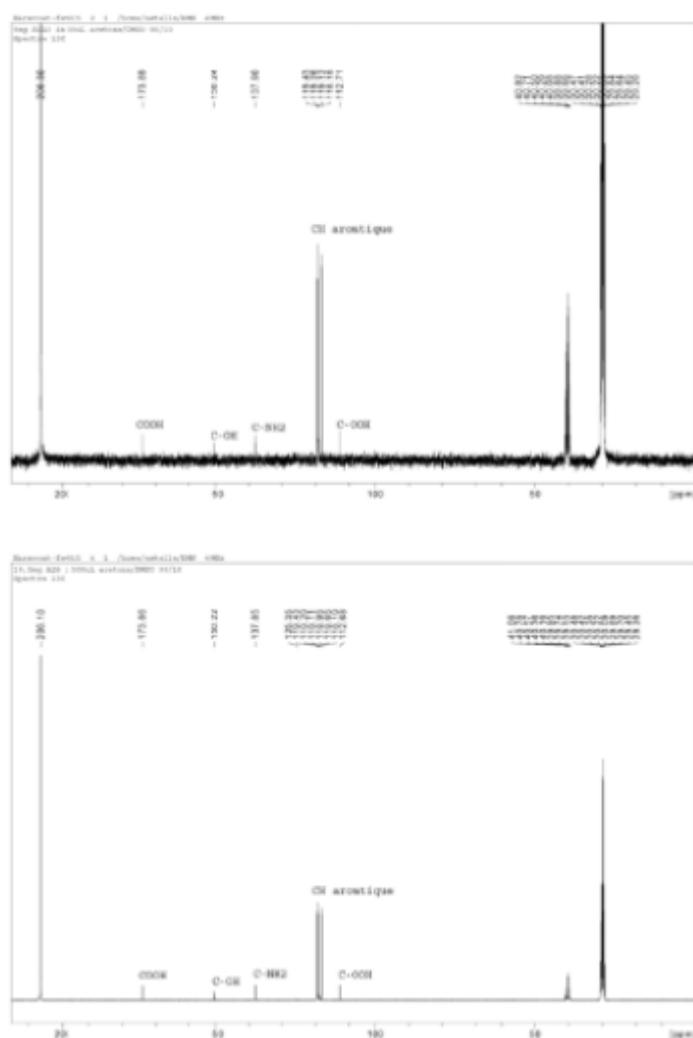


Fig. S2. Carbon NMR spectra of raw 3-ASA (top) and CO₂ recrystallized 3-ASA (bottom)

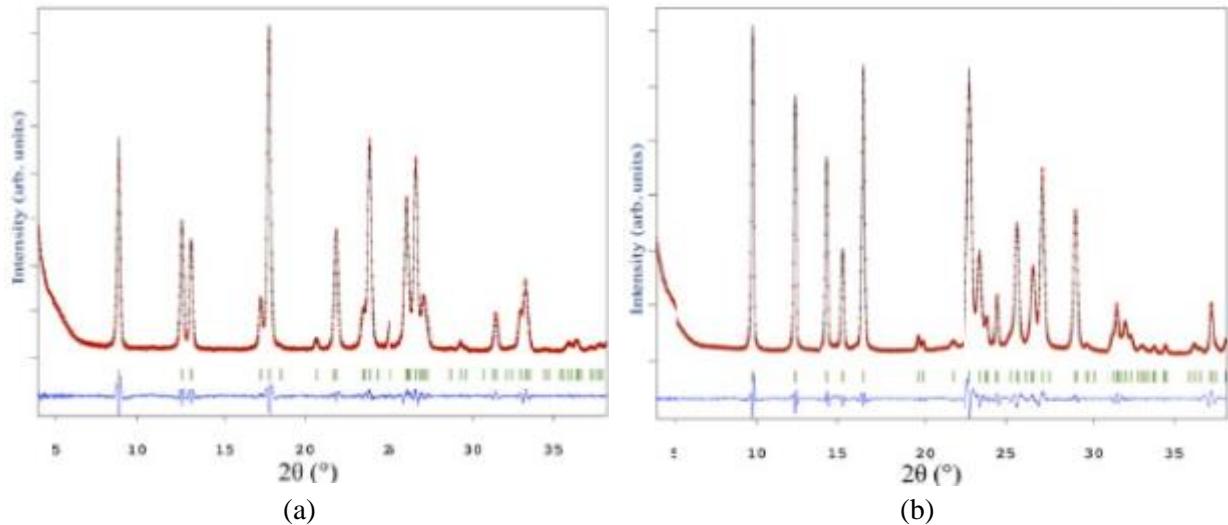


Fig. S3. Profile matching of raw and CO₂ recrystallized 3-ASA, open red circles correspond to the experimental PXRD pattern, black continuous line represent the calculated pattern (LeBail method) from the refined cell parameters, green vertical lines are predicted Bragg positions and blue continuous line is the difference between experimental and calculated patterns. (a) raw 3-ASA (background corrected Rwp = 0.099) and (b) CO₂ recrystallized 3-ASA (background corrected Rwp = 0.088)

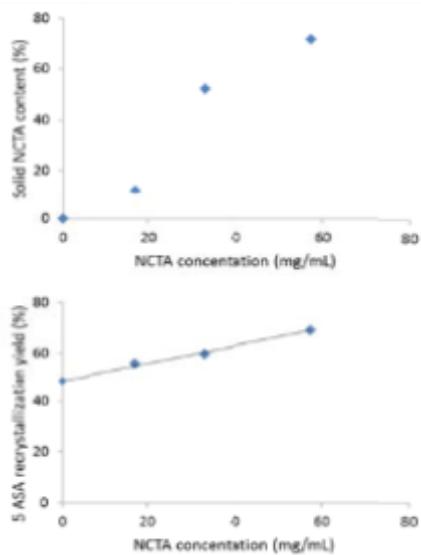


Fig. S4. Influence of NCTA concentration on the product composition (a:top) and on the recrystallization of 5-ASA (b:bottom). GAS recrystallization from acetone:DMSO at 36°C and P_{final} of 11 MPa. Solution of 5-ASA (C=17 mg/mL) and NCTA (0 to 57mg/mL).

Table S1. Crystal data and structure refinement for **1**

Empirical formula	C ₇ H ₇ NO ₃
Formula weight g.mol ⁻¹	153.14
Temperature/K	150.0
Crystal system	monoclinic
Space group	P2 ₁ /c
a/Å	10.2375(9)
b/Å	4.5168(5)
c/Å	14.7924(13)
β/°	107.394(8)
Volume/Å ³	652.73(11)
Z	4
ρ _{calc} g/cm ³	1.558
μ/mm ⁻¹	1.053
F(000)	320.0
Crystal size/mm ³	0.05 × 0.02 × 0.02
Radiation	CuKα (λ = 1.54187)
2Θ range for data collection/°	13.096 to 135.462
Index ranges	-11 ≤ h ≤ 12, -5 ≤ k ≤ 3, -16 ≤ l ≤ 17
Reflections collected	3676
Independent reflections	1174 [R _{int} = 0.0524, R _{sigma} = 0.0778]
Data/restraints/parameters	1174/0/119
Goodness-of-fit on F ²	1.021
Final R indexes [I>=2σ (I)]	R ₁ = 0.0673, wR ₂ = 0.1696
Final R indexes [all data]	R ₁ = 0.0995, wR ₂ = 0.2268
Largest diff. peak/hole / e Å ⁻³	0.41/-0.35

Table S2. Selected bond Lengths for **1**.

Atom	Atom	Length/Å	Atom	Atom	Length/Å
O1	C2	1.346(4)	C3	C7	1.487(4)
O2	C7	1.283(4)	C3	C4	1.401(5)
O3	C7	1.264(4)	C1	C6	1.383(5)
N1	C1	1.453(4)	C4	C5	1.377(5)
C2	C3	1.403(4)	C6	C5	1.390(5)
C2	C1	1.399(5)			

Table S3. Hydrogen Bonds for **1**.

D	H	A	d(D-H)/Å	d(H-A)/Å	d(D-A)/Å	D-H-A/°
O1	H1	O2	1.00(4)	1.68(4)	2.548(3)	143(3)
N1	H1A	O3 ¹	1.02(4)	1.77(4)	2.784(4)	177(3)
N1	H1B	O3 ²	0.98(4)	1.77(4)	2.737(4)	169(3)
N1	H1C	O2 ³	0.88(4)	1.95(4)	2.826(4)	173(4)

¹+X,3/2-Y,-1/2+Z; ²+X,1/2-Y,-1/2+Z; ³-X,1/2+Y,1/2-Z