

TAM Assistant Analysis Report

Kinetics

Model

Autocatalytic
 $d[C]/dt = k([A]_o - (a/c)([C]-[C]_o)) [C]$

Model Input Parameters

a/c: 1

Signal - "3-NO2C6H4N2+ TfO- 75 Nitrogen 11-11-16.rslt"

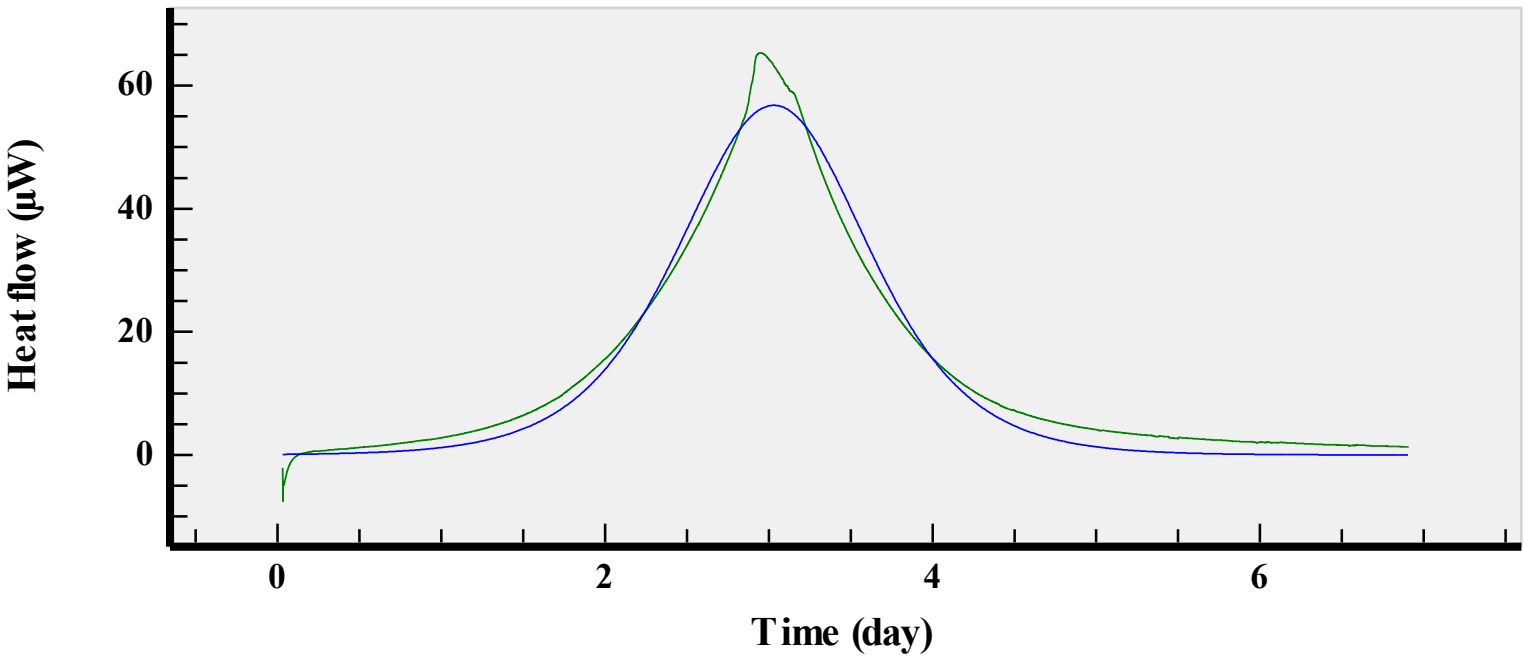
Input

Results file path:	<i>S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 75 Nitrogen 11-11-16.rslt</i>
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	93.475nW
k:	$0.008966 \text{ g}\cdot\text{s}^{-1}\cdot\text{mol}^{-1} \pm 2.3\text{e-}5 \text{ g}\cdot\text{s}^{-1}\cdot\text{mol}^{-1}$
dH:	$226.6 \text{ kJ/mol} \pm 440 \text{ J/mol}$
Co:	$1.38\text{e-}6 \pm 2.8\text{e-}8$
Standard deviation:	2.4707μW
NDF:	5835

Measured Calculated



Signal - "3-NO2C6H4N2+ TfO- 75 Nitrogen 11-19-16.rslt"

Input

Results file path:	<i>S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 75 Nitrogen 11-19-16.rslt</i>
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	99.385nW
k:	$0.009264\text{ g}\cdot\text{s}^{-1}\cdot\text{mol}^{-1} \pm 2.8\text{e-}5\text{ g}\cdot\text{s}^{-1}\cdot\text{mol}^{-1}$
dH:	$229.2\text{ kJ/mol} \pm 520\text{ J/mol}$
Co:	$1.40\text{e-}6 \pm 3.3\text{e-}8$
Standard deviation:	$2.6111\mu\text{W}$
NDF:	5819

Measured Calculated

