Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224										
T10	113	231										
T30	121	232										
T50	132	234										
T70	149	237										
T90	184	251										
EP	258	316										
Fraction	50%	50%										

Steps

- Convert all D86 analyses to TBP
  - Approximate IBP & EP as 1% & 99%
- Pick a set of TBP temperatures & interpolate for appropriate yield values
- Volumetrically blend at each temperature for combined TBP curve
- Interpolate for appropriate TBP values at the standard volumetric yields
- Convert to D86 analysis

Updated: July 5, 2017

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Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8					1		
T10	113	231	10	88.1	224.7					10		
T30	121	232	30	109.9	229.6					30		
T50	132	234	50	130.5	234.8					50		
T70	149	237	70	156.3	241.1					70		
T90	184	251	90	200.9	263.4					90		
EP	258	316	99	350.8	384.2					99		
Fraction	50%	50%										

Steps

- Convert all D86 analyses to TBP
  - Approximate IBP & EP as 1% & 99%
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Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8	25	0.4	0.0		1		
T10	113	231	10	88.1	224.7	50	1.7	0.0		10		
T30	121	232	30	109.9	229.6	75	5.8	0.0		30		
T50	132	234	50	130.5	234.8	100	19.3	0.0		50		
T70	149	237	70	156.3	241.1	125	44.4	0.0		70		
T90	184	251	90	200.9	263.4	150	65.4	0.0		90		
EP	258	316	99	350.8	384.2	175	80.0	0.0		99		
Fraction	50%	50%				200	89.7	0.9				
						225	92.6	11.0				
						250	94.8	79.6				
						275	96.4	91.7				
						300	97.6	94.5				
						325	98.4	96.5				
						350	99.0	97.9				
						375	99.4	98.8				
						400	99.6	99.3				

Steps

- Convert all D86 analyses to TBP
  - Approximate IBP & EP as 1% & 99%
- Pick a set of TBP temperatures & interpolate for appropriate yield values
- Volumetrically blend at each temperature for combined TBP curve
- Interpolate for appropriate TBP values at the standard volumetric yields
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Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8	25	0.4	0.0	0.2	1		
T10	113	231	10	88.1	224.7	50	1.7	0.0	0.9	10		
T30	121	232	30	109.9	229.6	75	5.8	0.0	2.9	30		
T50	132	234	50	130.5	234.8	100	19.3	0.0	9.6	50		
T70	149	237	70	156.3	241.1	125	44.4	0.0	22.2	70		
T90	184	251	90	200.9	263.4	150	65.4	0.0	32.7	90		
EP	258	316	99	350.8	384.2	175	80.0	0.0	40.0	99		
Fraction	50%	50%				200	89.7	0.9	45.3			
						225	92.6	11.0	51.8			
						250	94.8	79.6	87.2			
						275	96.4	91.7	94.0			
						300	97.6	94.5	96.0			
						325	98.4	96.5	97.5			
						350	99.0	97.9	98.4			
						375	99.4	98.8	99.1			
						400	99.6	99.3	99.5			

Steps

- Convert all D86 analyses to TBP
  - Approximate IBP & EP as 1% & 99%
- Pick a set of TBP temperatures & interpolate for appropriate yield values
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Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8	25	0.4	0.0	0.2	1	52.9	
T10	113	231	10	88.1	224.7	50	1.7	0.0	0.9	10	101.0	
T30	121	232	30	109.9	229.6	75	5.8	0.0	2.9	30	144.0	
T50	132	234	50	130.5	234.8	100	19.3	0.0	9.6	50	218.0	
T70	149	237	70	156.3	241.1	125	44.4	0.0	22.2	70	236.0	
T90	184	251	90	200.9	263.4	150	65.4	0.0	32.7	90	258.7	
EP	258	316	99	350.8	384.2	175	80.0	0.0	40.0	99	371.7	
Fraction	50%	50%				200	89.7	0.9	45.3			
						225	92.6	11.0	51.8			
						250	94.8	79.6	87.2			
						275	96.4	91.7	94.0			
						300	97.6	94.5	96.0			
						325	98.4	96.5	97.5			
						350	99.0	97.9	98.4			
						375	99.4	98.8	99.1			
						400	99.6	99.3	99.5			

Steps

- Convert all D86 analyses to TBP
  - Approximate IBP & EP as 1% & 99%
- Pick a set of TBP temperatures & interpolate for appropriate yield values
- Volumetrically blend at each temperature for combined TBP curve
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Blend Example

Blend Stock Data			D86 Converted to TBP			Blend at Selected Temperatures				Blend at Specified Yields		
	LSR	Mid Cut Reformate	Vol%	LSR	Mid Cut Reformate	°F	LSR	Mid Cut Reformate	Blend	Vol%	TBP	D86
°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8	25	0.4	0.0	0.2	1	52.9	120.5
T10	113	231	10	88.1	224.7	50	1.7	0.0	0.9	10	101.0	142.8
T30	121	232	30	109.9	229.6	75	5.8	0.0	2.9	30	144.0	163.6
T50	132	234	50	130.5	234.8	100	19.3	0.0	9.6	50	218.0	217.7
T70	149	237	70	156.3	241.1	125	44.4	0.0	22.2	70	236.0	228.6
T90	184	251	90	200.9	263.4	150	65.4	0.0	32.7	90	258.7	242.9
EP	258	316	99	350.8	384.2	175	80.0	0.0	40.0	99	371.7	305.3
Fraction	50%	50%				200	89.7	0.9	45.3			
						225	92.6	11.0	51.8			
						250	94.8	79.6	87.2			
						275	96.4	91.7	94.0			
						300	97.6	94.5	96.0			
						325	98.4	96.5	97.5			
						350	99.0	97.9	98.4			
						375	99.4	98.8	99.1			
						400	99.6	99.3	99.5			

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°API	81.8	32.8					81.8	32.8	54.1			
IBP	91	224	1	40.5	200.8	25	0.4	0.0	0.2	1	52.9	120.5
T10	113	231	10	88.1	224.7	50	1.7	0.0	0.9	10	101.0	142.8
T30	121	232	30	109.9	229.6	75	5.8	0.0	2.9	30	144.0	163.6
T50	132	234	50	130.5	234.8	100	19.3	0.0	9.6	50	218.0	217.7
T70	149	237	70	156.3	241.1							
T90	184	251	90	200.9	263.4							
EP	258	316	99	350.8	384.2							
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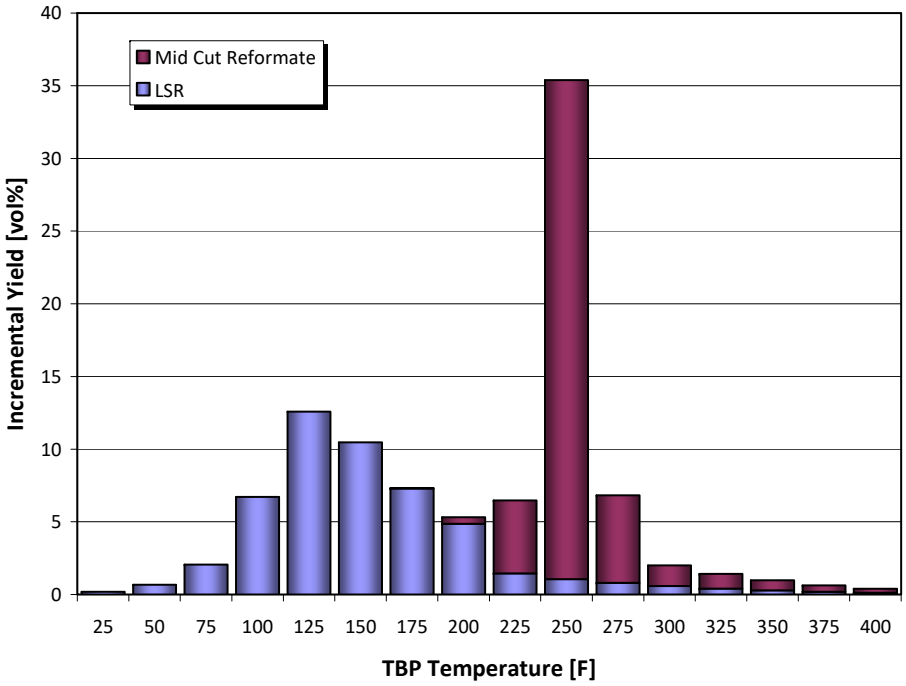

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T50	132	234	50	130.5	234.8	100	19.3	0.0	9.6	50	218.0	217.7
T70	149	237	70	156.3	241.1							
T90	184	251	90	200.9	263.4							
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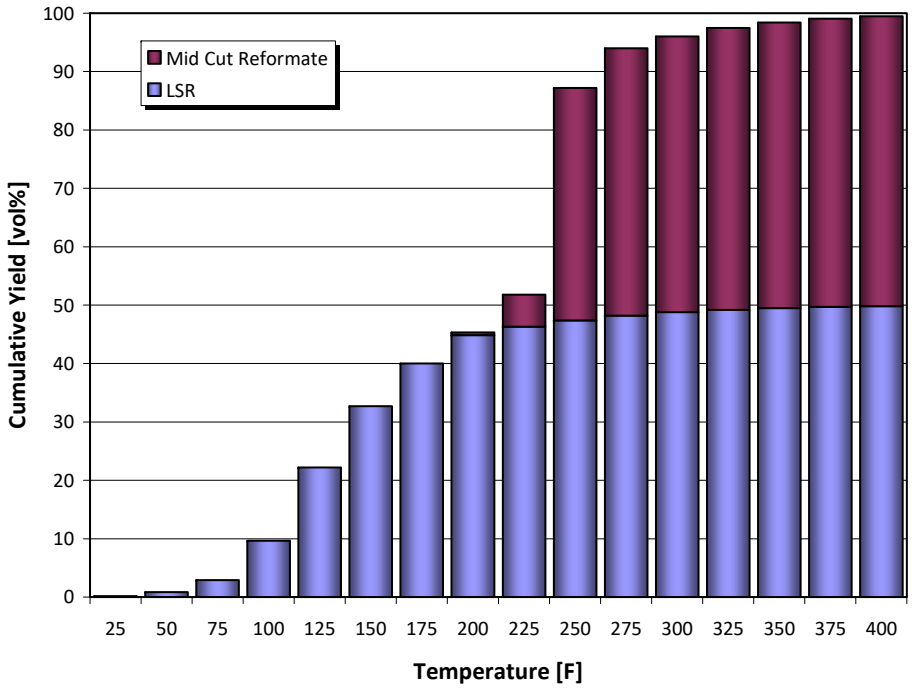

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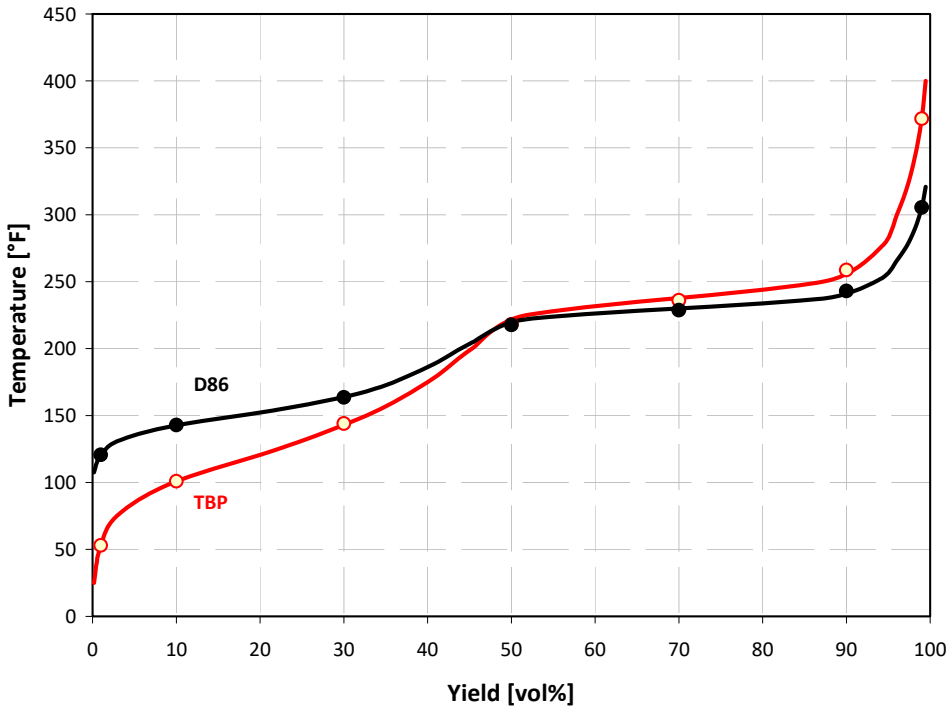

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