

# ==== Shimadzu LabSolutions Analysis Report =====

Sample Name : DL V9 R2  
 Sample ID :  
 Data Filename : DL V9 R2\_20240717\_DL V9\_SFB\_B\_ST1\_0.8 mL\_45 min\_Start\_001.lcd  
 Method Filename : SFB\_B\_ST1\_0.8 mL\_45 min\_Start.lcm  
 Batch Filename : 20240717\_DL V9.lcb  
 Vial # : 1-1  
 Injection Volume : 10 uL  
 Date Acquired : 7/17/2024 3:43:02 PM  
 Date Processed : 7/17/2024 4:28:02 PM

Sample Type : Unknown  
 Acquired by : System Administrator  
 Processed by : System Administrator

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## <Method>

### <<Header>>

Generated : 4/24/2024 3:47:23 PM  
 GeneratedBy : System Administrator  
 Modified : 7/15/2024 12:15:05 PM  
 ModifiedBy : System Administrator

### <<System Controller>>

Model : SCL-40  
 Event1 : Off  
 Event2 : Off  
 Sample Load Timing : Off

### <<Data Acquisition>>

LC Stop Time : 45.00 min  
 Detector A Name : Detector A  
 Detector A Sampling Frequency : 2 Hz  
 Detector A Start Time : 0.00 min  
 Detector A End Time : 45.00 min

### <<Pump>>

Mode : Isocratic flow  
 Pump A : LC-40D  
 Pump A Flow/Pressure : Flow  
 Pump System A Flow : 0.8000 mL/min  
 Pump System A Flow Slope : 30.00 min  
 Pump A PressMax : 90 bar  
 Pump A PressMin : 0 bar  
 Pump A Valve Model : Switching Valve  
 Pump A Valve : B  
 Pump A Compressibility Setting : On  
 Pump A Mobile Phase Settings : 0.45 /GPa

### <<Autosampler>>

Autosampler Model : SIL-40  
 Enable Autosampler : Use  
 Rinse Type : External only  
 Specify Plate : Off  
 Rinsing Volume : 500 uL  
 Cut Off Loop : Off  
 Specify Needle Stroke : Off  
 Rinsing Speed : 35 uL/sec  
 Sampling Speed : 5.0 uL/sec  
 Rinse Port R0 Purge Time : 2.0 min  
 Measuring Line Purge Time : 5.0 min  
 Rinse Mode : Before and after aspiration  
 Rinse Dip Time : 0 sec  
 Measuring Line Purge Volume : 100 uL  
 Air Gap Volume : Off  
 Rinse Port Liquid : R0

### <<Sample Pretreatment>>

Mode : Standard

### <<Oven>>

Oven Model : CTO-40C  
 Enable Oven : Use  
 Oven Temperature : 25 C  
 Maximum Temperature : 105 C

Ready Check : On  
 Wait Time : 5 min  
 Ready Range : 1.0 C  
 Fan Speed : Auto  
 Cooler Mode : Auto  
 Valve 1/L : FCV-0206  
 Valve 1/L Position : 1: Column1

## &lt;&lt;Detector A&gt;&gt;

Model : RID-20A  
 Mode : Analytical  
 Polarity : +  
 Use Cell Temp. : Use  
 Cell Temp. : 40.0 C  
 Response : 1.5 sec  
 Intensity Unit : Volt  
 Auxiliary Range : 1.0E-3 RIU/V  
 Recorder Range : 100.00 uRIU/FS  
 Synchronize with Auxiliary : Off  
 Purge Time : 20 min

## &lt;&lt;LC Time Program&gt;&gt;

Time	Module Controller	Command	Value	Comment
45.00		Stop		

## &lt;&lt;Peak Integration&gt;&gt;

## &lt;Detector A&gt;

Channel : Ch1  
 Width : 5 sec  
 Slope : 2000 uV/min  
 Drift : 0 uV/min  
 T.DBL : 1000 min  
 Max Slices : 0  
 Peak Top Detection : Normal  
 RT Compensation Mode : Fine  
 Min.Area/Height is made effective in Manual Integration : Off  
 Min.Area/Height : 1000 counts  
 Calculated by : Area  
 Noise Calculation Settings : Noise Data : Current Data  
 Calculation Method : ASTM  
 Range : Whole Range  
 Interval : 0.5 min  
 Include the Peak Detected Range : Off  
 Detection Limit Coefficient : 3.3  
 Quantitative Limit Coefficient : 10.0  
 Drift Calculation Settings : 0.000 - 15.000 min

## &lt;&lt;Integration Time Program(Method)&gt;&gt;

## &lt;Detector A&gt;

Channel : Ch1  
 Time Program : None

## &lt;&lt;Integration Time Program(Data)&gt;&gt;

## &lt;Detector A&gt;

Channel : Ch1  
 Time Program : None

## &lt;&lt;Identification&gt;&gt;

## &lt;Detector A&gt;

Window/Band : Window  
 Window : 5.00 %  
 Identification Method : Absolute  
 Peak Selection : Closest Peak  
 Display not identified peaks : Not display

## &lt;&lt;Quantitative&gt;&gt;

## &lt;Detector A&gt;

Quantitative Method : External Standard  
 Calculated by : Area  
 # of Calibration Levels : 14  
 Curve Fit Type : Linear  
 Zero : Not Forced  
 Weighting Method : None  
 X Axis of Calib. Curve : Conc.  
 Units : mol/L  
 Format of Conc. : Decimals  
 Format of Conc. Figure : 5  
 Group Type : Not Used  
 Check %Dev(Standard) : No

Check Accuracy[%](Standard) : No  
 Check %Dev(Control) : No  
 Check Accuracy[%](Control) : No  
 Check %Dev(Additive) : No  
 Check Accuracy[%](Additive) : No  
 Check %Dev(Unknown) : No  
 Check Accuracy[%](Unknown) : No  
 Check Quantitation Limit : No  
 Check Detect Limit : No

## &lt;&lt;Compound Table&gt;&gt;

## &lt;Detector A&gt;

ID# : 1  
 Name : Methanol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 14.400 min  
 Retention Index : 0  
 Concentration : [1]=3.016738 [2]=1.049395 [3]=0.4943277  
                   [4]=0.2893701 [5]=0.1127578 [6]=0.06136267  
                   [7]=0.01619725 [8]=3.016738 [9]=1.049395  
                   [10]=0.4943277 [11]=0.2893701 [12]=0.1127578  
                   [13]=0.06136267 [14]=0.01619725  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 4.720087e+005  
 Intersection : 1.693726e+003  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 2  
 Name : Glycerin  
 Type : Target  
 Channel : Ch1  
 Retention Time : 10.000 min  
 Retention Index : 0  
 Concentration : [1]=2.958375 [2]=1.078646 [3]=0.5353454  
                   [4]=0.3066948 [5]=0.114594 [6]=0.05901699  
                   [7]=0.0117174 [8]=2.958375 [9]=1.078646  
                   [10]=0.5353454 [11]=0.3066948 [12]=0.114594  
                   [13]=0.05901699 [14]=0.0117174  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 7.326784e+006  
 Intersection : 2.573900e+005  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 3  
 Name : n-Propanol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 20.000 min  
 Retention Index : 0  
 Concentration : [1]=3.02526 [2]=1.092217 [3]=0.5139845  
                   [4]=0.3105323 [5]=0.09785473 [6]=0.04497364  
                   [7]=0.01087275 [8]=3.02526 [9]=1.092217  
                   [10]=0.5139845 [11]=0.3105323 [12]=0.09785473  
                   [13]=0.04497364 [14]=0.01087275  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 3.955755e+006  
 Intersection : -2.585461e+004  
 Correction Factor : 1.000000

Standard concentration factor : 1.000000

ID# : 4  
 Name : 1,2 Propandiol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 12.400 min  
 Retention Index : 0  
 Concentration : [1]=2.977546 [2]=1.016412 [3]=0.5030017  
                   [4]=0.3027638 [5]=0.1023958 [6]=0.04970167  
                   [7]=0.01157971 [8]=2.977546 [9]=1.016412  
                   [10]=0.5030017 [11]=0.3027638 [12]=0.1023958  
                   [13]=0.04970167 [14]=0.01157971  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 5.771075e+006  
 Intersection : 6.007717e+004  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 5  
 Name : 1,3 Propandiol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 13.000 min  
 Retention Index : 0  
 Concentration : [1]=2.976375 [2]=0.9968958 [3]=0.4990984  
                   [4]=0.2900131 [5]=0.10734 [6]=0.04944145  
                   [7]=0.0100184 [8]=2.976375 [9]=0.9968958  
                   [10]=0.4990984 [11]=0.2900131 [12]=0.10734  
                   [13]=0.04944145 [14]=0.0100184  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 5.532080e+006  
 Intersection : 6.014722e+004  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 6  
 Name : iso-Propanol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 16.825 min  
 Retention Index : 0  
 Concentration : [1]=3.03666 [2]=1.003405 [3]=0.5418687  
                   [4]=0.3101858 [5]=0.1067771 [6]=0.04972951  
                   [7]=0.01397083 [8]=3.03666 [9]=1.003405  
                   [10]=0.5418687 [11]=0.3101858 [12]=0.1067771  
                   [13]=0.04972951 [14]=0.01397083  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 3.797216e+006  
 Intersection : -2.284739e+004  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 7  
 Name : Hydroxyacetone  
 Type : Target  
 Channel : Ch1  
 Retention Time : 13.300 min  
 Retention Index : 0  
 Concentration : [1]=2.855514 [2]=0.9609004 [3]=0.4875675  
                   [4]=0.3072624 [5]=0.1038742 [6]=0.04860286

[7]=0.009361501 [8]=2.855514 [9]=0.9609004  
 [10]=0.4875675 [11]=0.3072624 [12]=0.1038742  
 [13]=0.04860286 [14]=0.009361501  
 Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 4.865699e+006  
 Intersection : 5.855022e+004  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 8  
 Name : Ethylenglykol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 12.200 min  
 Retention Index : 0  
 Concentration : [1]=2.933794 [2]=1.030353 [3]=0.4898163  
 [4]=0.3033639 [5]=0.09840986 [6]=0.059971  
 [7]=0.01068632 [8]=2.933794 [9]=1.030353  
 [10]=0.4898163 [11]=0.3033639 [12]=0.09840986  
 [13]=0.059971 [14]=0.01068632

Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 4.284813e+006  
 Intersection : 4.449721e+003  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 9  
 Name : Ethanol  
 Type : Target  
 Channel : Ch1  
 Retention Time : 16.000 min  
 Retention Index : 0  
 Concentration : [1]=3.010594 [2]=1.02339 [3]=0.5257763  
 [4]=0.2939754 [5]=0.0961865 [6]=0.04960971  
 [7]=0.01299818 [8]=3.010594 [9]=1.02339  
 [10]=0.5257763 [11]=0.2939754 [12]=0.0961865  
 [13]=0.04960971 [14]=0.01299818

Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000  
 1st Coefficient : 2.109543e+006  
 Intersection : -9.590194e+003  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

ID# : 10  
 Name : Propionsäure  
 Type : Target  
 Channel : Ch1  
 Retention Time : 13.600 min  
 Retention Index : 0  
 Concentration : [1]=2.962704 [2]=0.9915078 [3]=0.5019324  
 [4]=0.3085198 [5]=0.1036906 [6]=0.04835313  
 [7]=0.01168534 [8]=2.962704 [9]=0.9915078  
 [10]=0.5019324 [11]=0.3085198 [12]=0.1036906  
 [13]=0.04835313 [14]=0.01168534

Peak Selection : Default(Closest Peak)  
 Calculated by : Default(Area)  
 Curve Fit Type : Default(Linear)  
 Zero : Default(Not Forced)  
 Weight : Default(None)  
 Window/Band : Default(Window)  
 Spiked : 0.000

1st Coefficient : 4.601450e+006  
 Intersection : -1.609005e+003  
 Correction Factor : 1.000000  
 Standard concentration factor : 1.000000

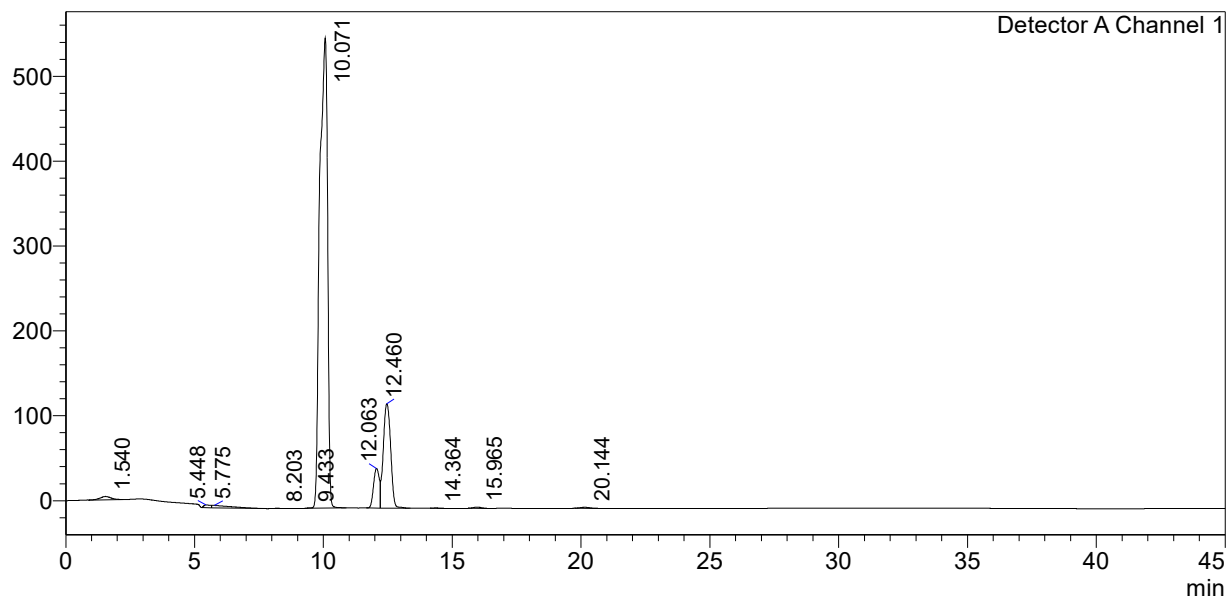
## &lt;&lt;Column Performance&gt;&gt;

## &lt;Detector A&gt;

Calculation Method : USP  
 Unretained Peak Time : Time at 1st Peak  
 Column Length : 150 mm  
 Calculate Identified Peaks Only : Off  
 Calculation of Relative Retention Time : Off

## &lt;Chromatogram&gt;

mV



## &lt;Peak Table&gt;

Detector A Channel 1

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1.540	114309	3862	0.000			
2	5.448	59266	3184	0.000			
3	5.775	158458	2850	0.000		V	
4	8.203	4093	339	0.000			
5	9.433	6277	503	0.000			
6	10.071	11721267	553748	1.565	mol/L	V	Glycerin
7	12.063	730048	46710	0.169	mol/L		Ethylenglykol
8	12.460	2455564	122862	0.415	mol/L	V	1,2 Propandiol
9	14.364	6310	375	0.010	mol/L		Methanol
10	15.965	30484	1458	0.019	mol/L		Ethanol
11	20.144	31085	1173	0.014	mol/L		n-Propanol
Total		15317161	737065				