

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

| | | | |
|------------------|---|--------------|------------------------|
| Sample Name | : DL V31 R3 | | |
| Sample ID | : | | |
| Data Filename | : DL V31 R3_20250226_DL V31_SFB_B_ST1_0.8 mL_45 min_Start_002.lcd | | |
| Method Filename | : SFB_B_ST1_0.8 mL_45 min_Start.lcm | | |
| Batch Filename | : 20250303_DL V29-32_Postrun.lcb | | |
| Vial # | : 3-51 | Sample Type | : Unknown |
| Injection Volume | : 10 uL | | |
| Date Acquired | : 2/26/2025 1:50:27 PM | Acquired by | : System Administrator |
| Date Processed | : 3/3/2025 2:20:56 PM | Processed by | : System Administrator |

<Method>

<<Header>>

| | |
|-------------|-------------------------|
| Generated | : 4/24/2024 3:47:23 PM |
| GeneratedBy | : System Administrator |
| Modified | : 2/28/2025 10:17:21 AM |
| 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 | : 20.00 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

<<Detector A>>

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

<<LC Time Program>>

| Time | Module | Command | Value | Comment |
|-------|----------------|---------|-------|---------|
| 0.01 | RID-20A(DET.A) | Zero | | |
| 45.00 | Controller | Stop | | |

<<Peak Integration>>

<Detector A>

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

<<Integration Time Program(Method)>>

<Detector A>

Channel : Ch1
 Time Program : None

<<Integration Time Program(Data)>>

<Detector A>

Channel : Ch1
 Time Program : None

<<Identification>>

<Detector A>

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

<<Quantitative>>

<Detector A>

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 |

<<Compound Table>>

<Detector A>

| | | | |
|-----------------|-----------------|-----------------|----------------|
| 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 | : [13]-0.68136267 |
| Calculated by | : Default(Closest Peak) |
| 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

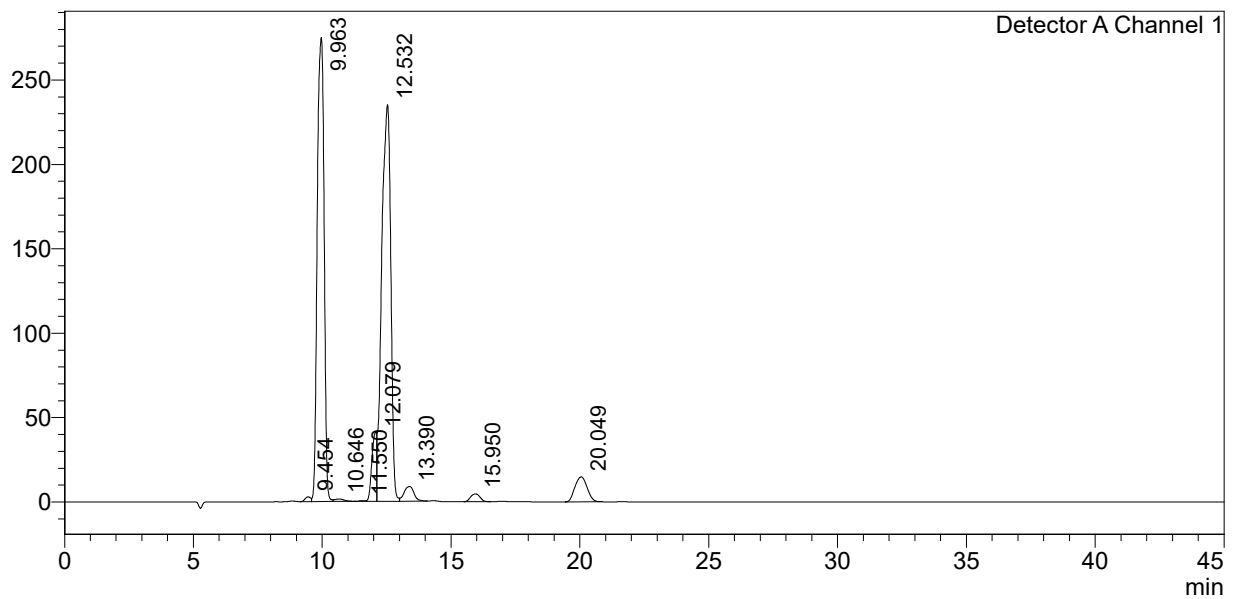
<<Column Performance>>

<Detector A>

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

<Chromatogram>

mV



<Peak Table>

Detector A Channel 1

| Peak# | Ret. Time | Area | Height | Conc. | Unit | Mark | Name |
|-------|-----------|----------|--------|-------|-------|------|----------------|
| 1 | 9.454 | 42171 | 2844 | 0.000 | | | |
| 2 | 9.963 | 5099267 | 274897 | 0.661 | mol/L | V | Glycerin |
| 3 | 10.646 | 39351 | 1487 | 0.000 | | V | |
| 4 | 11.550 | 7574 | 474 | 0.000 | | V | |
| 5 | 12.079 | 523779 | 40749 | 0.121 | mol/L | V | Ethylenglykol |
| 6 | 12.532 | 5765522 | 234979 | 0.989 | mol/L | V | 1,2 Propandiol |
| 7 | 13.390 | 233566 | 8666 | 0.036 | mol/L | V | Hydroxyacetone |
| 8 | 15.950 | 116362 | 4574 | 0.060 | mol/L | | Ethanol |
| 9 | 20.049 | 485906 | 14811 | 0.129 | mol/L | | n-Propanol |
| Total | | 12313500 | 583482 | | | | |