Agilent Drivers for Thermo Scientific Chromeleon 7

Release Notes – Revision 2.5

Introduction

The Agilent Drivers for Thermo Scientific Chromeleon 7 is an instrument control application for the Agilent instrument portfolio running in the Thermo Scientific Chromeleon 7.2 SR5 or higher environment, and for Thermo Fisher Xcalibur software.

References to product documentation for installation and usage are provided, as well as references to documentation regarding known issues and workarounds.

Table 1 Terms and abbreviations used in this document

Terms	Description
Agilent Drivers	Agilent Drivers for Thermo Chromeleon 7
Chromeleon 7	Thermo Scientific Chromeleon 7 Chromatography Data System (CDS)
Chromeleon	Thermo Scientific and Chromeleon are registered trademarks of Thermo Fisher Scientific.
Thermo	Thermo Fisher Scientific

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When any change is made to Agilent software, the validation status of the software needs to be re-established by the user. Whenever software is changed, a validation analysis should be conducted not just for the validation of an individual change, but also to determine the extent and impact of that change on the entire software system.

Agilent Drivers for Chromeleon 7 Revision 2.5 - What's new?

Updated GC and HS Drivers

This release of the Agilent Drivers for Chromeleon includes GC Driver version 3.6 and HS driver version 3.1. The update includes defect fixes and is a requirement for the GC Feature Selection functionality.

GC Feature Selection

This feature allows users to enable or disable specific features in the 8890 GC firmware and in the 9000 GC firmware. The GC Feature Selection requires firmware version 2.4 or later. The features can be selected in a new tab in the instrument configuration.

Updated Software Verification Tool

This release of the Agilent Drivers for Chromeleon includes the Software Verification Tool version B.01.01.013. The update is a requirement for the use of CLR 4 and does not introduce any changes to the software verification process.

Updated ELSD driver

This release of the Agilent Drivers for Chromeleon includes the ELSD driver 1.8. This version of the ELSD driver for the 1290 and 1260 models requires revision 32.06 or later of the ELSD firmware. If an older version of the ELSD firmware is encountered the driver will display the message; “Error 101 Unsupported ELSD firmware”. No new features have been added to this release. No additional new modules are supported with this release.

ADC supports Microsoft .NET CLR 4

Chromeleon 7 is moving to obsolete .NET CLR 2 in the future. Starting with release 2.5 ADC now supports .NET CLR 4, thus ensuring ADC will be compatible with future versions of Chromeleon 7. This change does not break backward compatibility. ADC 2.5 still uses CLR 2 when installed on a PC with a Chromeleon version prior to 7.3.1. Starting with Chromeleon 7.3.1 ADC will use CLR 4. The Chromeleon installer automatically install .NET 4.8, therefore no further action is required to use ADC 2.5.

Microabsorbance Units

Signals of unit mAU can now be converted to µAU. The new functionality is available for all 2D signals, i.e., chromatograms. 3D data is not converted. Select the "Convert mAU to µAU" checkbox during instrument configuration to enable the conversion. This will convert the signals to µAU automatically and update the configuration report accordingly. See the LC user guide for details.

Mixed instrument support

The Agilent Drivers for Thermo Chromeleon have been tested in conjunction with the Thermo Fisher Corona Veo Charged Aerosol detector and the WPS-3000 sampler. Other combinations of third-party modules are not tested and therefore not supported. See the chapter Compatibility for detailed information.

Manual Injection

The manual injection workflow for GC has been improved based on user feedback-.

The manual injection valves for LC are now supported.

Modular Installation Qualification

Chromeleon 7.3.1 introduces a new feature named modular IQ. This feature allows third party drivers like the Agilent Drives for Chromeleon to hook into the Chromeleon IQ. ADC 2.5 uses this feature thereby providing an enhanced installation qualification. The Agilent Software Verification Tool continues to be included with ADC for compatibility purposes.

Windows 11 Support

This release of the Agilent Drivers for Thermo Chromeleon introduces support Windows 11.

Compatibility

The compatibility matrix provides information about installation and execution prerequisites with respect to hardware, firmware, and the operating system.

Supported Chromatographic Data System

Support for Thermo Fisher Chromeleon 7 was introduced with Chromeleon 7.2 SR5 and includes all subsequently release Chromeleon versions including their respective maintenance updates. At the time of writing the latest Chromeleon release was Chromeleon 7.3.1.

Supported Agilent Components

The following Agilent components are included in this release of the Agilent Drivers for Chromeleon 7:

- Agilent Instrument Control Framework 2.6 Update 5
- Agilent LC Driver A.02.19 SR2
- Agilent ELSD Driver 1.8
- Agilent GC Driver 3.6
- Agilent HS Driver 3.1

Supported Operating Systems

The supported operating system in use is determined by the hosting CDS.

- Microsoft Windows 8.1 Professional, 64-bit
- Microsoft Windows 10 Pro and Enterprise, 64-bit
- Microsoft Windows 11 Enterprise
- Microsoft Windows Server 2016, 64-bit
- Microsoft Windows Server 2012, 64-bit

The LC Drivers have been optimized for the Windows default font size. Larger font sizes may require increasing the window size or may cause truncations.

Supported Language Settings

The Agilent Drivers for Chromeleon 7 are localized in English only.

Supported Third-Party Modules

Supported third-party modules are the Thermo Fisher Corona Veo Charged Aerosol detector and the WPS-3000 sampler. These modules can be combined with Agilent LC modules in one instrument.

During testing some functional limitations were identified. The following functions or use cases are therefore not supported. For instructions on usage and maintenance refer to the manufacturer's documentation.

WPS-3000 limitations

- The WPS-3000 must be the only sampler in the instrument
- Overlapping injections are not supported
- The smart startup / shutdown feature is not supported
- It is not possible to link the pump with the autosampler. This means injection synchronization is not possible
- The sampler may only be used as injection source. Fraction collection is not supported.
- User-Defined programs are not supported
- USB-to-LAN adapters are not supported

Corona Veo Charged Aerosol detector limitations

Besides the USB connection, the Corona Veo CAD requires a start trigger cable running between the detector and the sampler. An emergency pump shut down cable is highly recommended. A suitable cable kit may be purchased from thermo Fisher (P/N 6081.2300). The kit consists of the following parts:

- Connector 9 Pin Female
- 2 x Connector, 9 Pin, Male
- 2 x Connector, 15 Pin, Male
- RS232 <-> USB Interface Cable
- 2 x Cable I/O 2-Conductor

Assembling the start trigger cable

For remote control, Agilent LC systems use either a 9-pin based remote port, or a 15-pin based enhanced remote interface (ERI). Verify which of the ports is present on your autosampler and either use the 9-pin or 15-pin connector accordingly.

When using a 9-pin based remote port, connect the bare wire ends of the 2-conductor I/O cable to pins 1 (black) and 3 (red) of the male 9-pin adapter.

When using a 15-pin based enhanced remote interface, connect the bare wire ends of the 2-conductor I/O cable to pins 7 (red) and 13 (black) of the male 15-pin adapter corresponding to the pin assignment shown below.

Attach either the male 9-pin adapter or the male 15-pin adapter to your sampler.

Plug the USB-RS232 adapter into a free USB serial port on the Instrument Controller.

Connect the 2 conductor I/O cable to the female 9 Pin Adapter by attaching the bare wire ends of the cable to pins 5 (green), 7 (black) and 8 (red). Attach the female 9 pin connector to the USB-RS232 adapter.

Assembling the emergency pump shutdown cable

To prevent damage to the Corona Veo (RS) in case of a failure, the installation of an emergency pump shut-off is recommended.

Connect the three stranded end of the I/O cable to the ports 1 (red, B-1), 2 (black, B-2) and 3 (green, B-3) on the Terminal B on back of the Corona Veo (RS).

When using a 9-pin based remote port, connect the bare wire ends of the conductor I/O cable to pins 1 (black) and 4 (red) of the male 9-pin adapter.

When using a 15-pin based enhanced remote interface, connect the bare wire ends of the conductor I/O cable to pins 6 (red) and 13 (black) of the male 15-pin adapter.

Attach either the male 9-pin adapter or the male 15-pin adapter to your pump.

Mixed Instrument Configuration

To configure an instrument consisting of Agilent LC modules and Themo Fisher LC modules, first configure the Agilent LC modules as described in this user guide. Then select and add the appropriate driver for the Thermo Fisher module from the list of available drivers. Refer to the Thermo Fisher documentation for details on module configuration options.

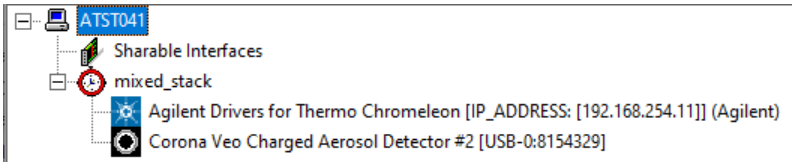


Figure 1. Example of a mixed instrument

Using the mixed instrument

After starting the Chromeleon console the ePanels for the Agilent modules and the Thermo Fisher modules are available.

NOTE The third-party modules are not integrated into the Status Dashboard on the Agilent Home ePanel.

To create an instrument method, follow the Instrument Method Wizard and save the instrument method. The user interfaces of both, the Agilent LC, and the third-party modules, are integrated in the method wizard. The aforementioned use case and functional limitations need to be considered when creating an instrument method. The instrument method can then be used in sequences as usual.

Installation

Stand-Alone installer

NOTE

Thermo Fisher Chromeleon 7 SR5 or later must be installed before the Agilent Drivers. The Agilent Drivers installation routine will abort if no supported Chromeleon version is detected.

Installing the Agilent Drivers is a two-step process. In the first step the Software Verification Tool (SVT) is installed. In the second step the Agilent Drivers are installed.

To install the SVT double click the SFVtool.msi and follow the installation wizard.

The Agilent Drivers are delivered as a single Windows Installer file, named Agilent_Drivers_for_Thermo_Chromeleon.msi. The installation process is started by double-clicking the file. Follow the instructions of the installation wizard to install Agilent Drivers. For detailed step-by-step instructions see chapter 3 of the Agilent Drivers User Guide.

Installation during Chromeleon installation

The Agilent Drivers for Chromeleon 7 are delivered on the Chromeleon installation medium available at time of release. Installation prerequisites are outlined by Chromeleon (e.g. CPU, memory, and hard drive space).

The preferred installation is the automatic installation using the advanced option of the Chromeleon installer. Please refer to the Chromeleon Installer documentation for installation, updates, and uninstallation.

Installation Verification

Agilent offers a Software Verification Tool (SVT) to verify the correct installation of the software components. The tool is delivered along with the Agilent Drivers for Chromeleon 7.

Using the Chromeleon installation routine, the tool is installed along with the Agilent Drivers.

Manual installation of the Agilent Drivers for Chromeleon requires the SVT to be installed prior to the Agilent Drivers installation.

After the installation of the SVT execute the verification with the following steps:

Open *Start* > *Programs* > *Agilent Technologies* and select *Software Verification Tool*.

In the upcoming dialog box, select the required report type and the components of interest and click *Qualify*. The corresponding browser opens and shows the resulting files and passed or failed status of the installation.

NOTE

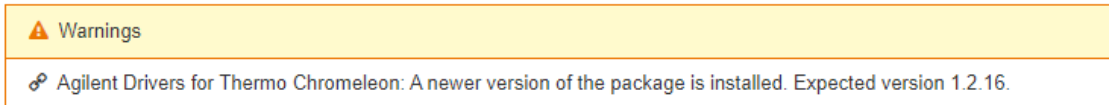
- The Chromeleon IQ does not start the Agilent SVT, the Agilent Software Verification Tool requires manual execution
- Silent execution of the installation verification is possible, please refer to the User Guide for the Agilent Drivers for Chromeleon 7.
- If the Agilent Drivers for Chromeleon are already installed on the system, the tool does not have to be upgraded or installed again.

In addition to the registry entries listed in the SVT report the files listed in Appendix A are created.

Chromeleon IQ report

Starting with Chromeleon 7.3.1 and ADC 2.5 the Chromeleon Modular IQ feature is used to verify the ADC installation. Other combinations of Chromeleon and ADC may result in several warnings in the Chromeleon IQ report. This is expected behavior and does not imply problems with the installation. The SVT should be used in these cases to verify the ADC installation.

Chromeleon versions 7.2.8 through 7.3 will not report warnings when the version packaged on the Chromeleon installation medium is installed. Installing a different version of the Agilent Drivers will lead to warnings in the IQ report. The Chromeleon IQ checks the installed files against those packaged on the installation medium. If a different version is detected this is reported as a warning in the IQ report and therefore warnings are to be expected.



The report will include a reason for the warning as shown above as well as a list of all files to which this warning applies. For this release of the Agilent Driver a total of 67 files will be listed. A table of all affected files and a screenshot of all 67 warnings is included in Appendix B.

Upgrade Installation

Upgrading the Agilent Drivers for Chromeleon 7 from version 1.1 Update 1 or version 1.2 requires additional steps due to changes in the handling of Run Diagnostic Data and newly added features. After the installation it is recommended to update the instrument configuration to ensure that the changes become active. In rare cases not updating the instrument configuration may result in connectivity issues. Please see also chapter Backward Compatibility in the User Guide.

Updating the instrument configuration

The steps to update the instrument configuration are as follows:

1. Open the Instrument Configuration Manager and connect to the upgraded IPC
2. Expand the instrument node
3. Select the Agilent Drivers for Chromeleon 7 instrument node and note the ip address or hostname
4. Delete the Agilent Drivers for Chromeleon 7 instrument node
5. Click Add Module
6. Select Agilent Technologies from the vendor list
7. Select Agilent Drivers for Thermo Chromeleon from the modules list and click OK
8. In the new window select the node corresponding to the instrument family, e.g. 1290 LC
9. Click Auto Configure
10. Enter the ip address or hostname noted in step 3 and click OK

    After a few seconds the modules will be shown in a list
11. Click OK. The new configuration is now being loaded. If applicable edit the signal names.
12. Save the updated instrument configuration by clicking File > Save Installation

Updating instrument methods

After upgrading the Agilent Drivers for Chromeleon 7, the instrument methods may require an update. This is the case when the instrument method uses the Run Diagnostic Data signals.

After opening the instrument method, the Chromeleon method translation tool starts automatically. Choose Adjust Manually and open the method script. Command lines requiring an update are marked with a red background and can be updated by clicking on the command.

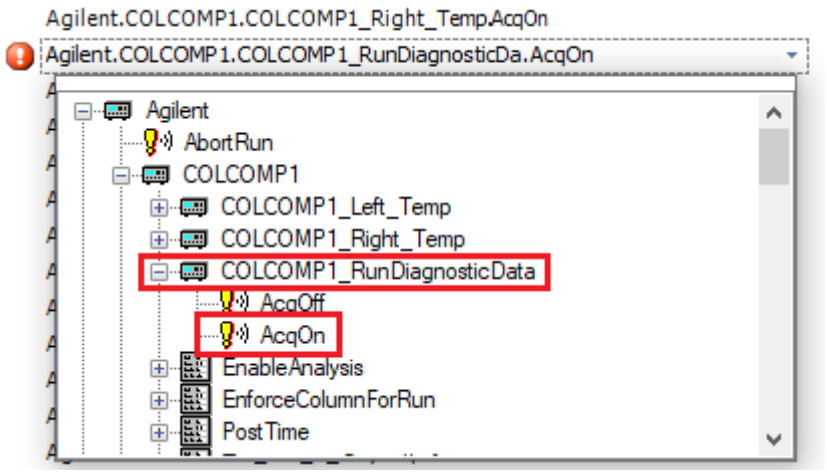
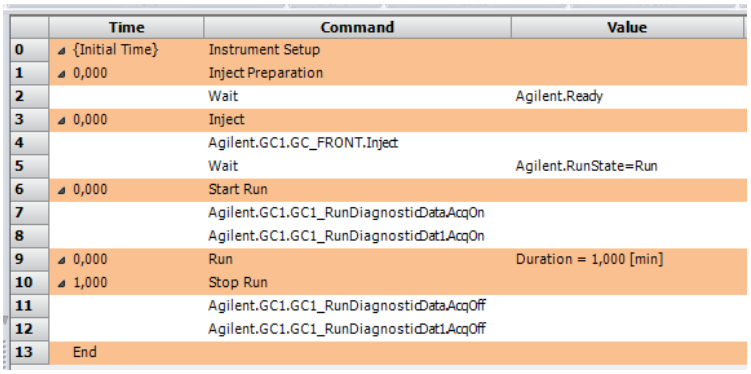


Figure 1. Updating the RunDiagnosticData command in the method script

Upgrade Installation

Instrument methods for GCs (7890B, 8890, Intuvo 9000) created prior to version 2.3 of the Agilent Drivers for Thermo Chromeleon include two Run Diagnostic Data channels as shown in figure 2.

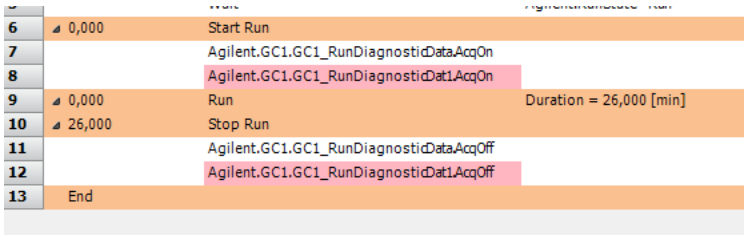


	Time	Command	Value
0	{Initial Time}	Instrument Setup	
1	0,000	Inject Preparation	
2		Wait	Agilent.Ready
3	0,000	Inject	
4		Agilent.GC1.GC_FRONT.Inject	
5		Wait	Agilent.RunState=Run
6	0,000	Start Run	
7		Agilent.GC1.GC1_RunDiagnosticData.AcqOn	
8		Agilent.GC1.GC1_RunDiagnosticDat1.AcqOn	
9	0,000	Run	Duration = 1,000 [min]
10	1,000	Stop Run	
11		Agilent.GC1.GC1_RunDiagnosticData.AcqOff	
12		Agilent.GC1.GC1_RunDiagnosticDat1.AcqOff	
13	End		

Figure 2. GC instrument method including two Run Diagnostic Data channels

Versions 2.3 and later of the Agilent Drivers for Thermo Chromeleon only use one Run Diagnostic Data channel to provide the same information. It is necessary to update the GC instrument methods manually to adjust for the change in the driver.

After opening the instrument method, the Chromeleon method translation tool starts automatically. Choose Adjust Manually and open the method script. Delete the two command lines highlighted in red and save the method.



6	0,000	Start Run	
7		Agilent.GC1.GC1_RunDiagnosticData.AcqOn	
8		Agilent.GC1.GC1_RunDiagnosticDat1.AcqOn	
9	0,000	Run	Duration = 26,000 [min]
10	26,000	Stop Run	
11		Agilent.GC1.GC1_RunDiagnosticData.AcqOff	
12		Agilent.GC1.GC1_RunDiagnosticDat1.AcqOff	
13	End		

Figure 3. The commands highlighted in red need to be deleted

Support Information/User Documentation

The Agilent Drivers for Chromeleon 7 include the following components:

- Agilent Driver for Thermo Chromeleon 7 (integration adapter)
- Agilent Instrument Control Framework (ICF)
- Agilent Instrument Control Framework - LC Driver
- Agilent Instrument Control Framework - GC-HS Driver

The following components documents are present in the folder structure \Packages\Agilent Chromeleon Drivers\Documentation of the Chromeleon DVD:

- Release Notes

  The release notes document new and changed feature sets, important information on the required operating environment, supported modules and firmware, impact analysis etc.
- Validation Certificate/Declaration of Software Quality

Online-Help

Online help is available either via the help button present on the window screen or using the F1 button. F1 brings up online help even if there is no help button present. LC or GC-HS Driver Help explains the parameters present on the current window along with the possible parameter ranges, variables and allowed formats, which may be entered.

Online help for the Agilent Drivers for Chromeleon can only be accessed via the Help button below the dashboard. Help provides information on special handling required to run Agilent LC or GC-HS modules in a Chromeleon environment.

User Guides

Two user guide documents are included in the installation for the Agilent Drivers for Chromeleon 7. One user guide for LC and one for GC.

Please navigate on the Chromeleon disk to the folder \Packages\Agilent Chromeleon Drivers\Documentation.

The user guides offer information on

- how to install the Agilent Drivers
- how to configure the instrument
- how to run injections
- the method handling (Agilent Method user interface/Chromeleon Script Editor)
- how to migrate methods based on native drivers and ICF based drivers
- how to troubleshoot

Obtaining Technical Support

For all technical support enquiries regarding Thermo Scientific Chromeleon 7

Chromatography Data System (CDS) software please contact your Thermo Fisher Scientific customer support organization as your first point of contact regarding any data system and instrument control enquiries.

If your question or problem is related directly to your Agilent instrument, please contact your local Agilent Sales & Support organization for assistance.

In any communication with the Thermo Fisher Scientific or Agilent Technologies support teams regarding a problem, please clearly state the following:

- Your name, address, e-mail address and telephone number.
- Your Chromeleon version number together with installed Chromeleon updates.
- Your instrument driver information is listed in the Agilent Software Verification Tool report. Please run this tool by navigating to Start > Agilent Technologies > Software Verification Tool from your Windows operating system.
- Your instrument information can be found in Chromeleon 7 by accessing the Instrument Status dashboard and clicking i.
- A description of the problem including any errors that were displayed in the Instrument Audit Trail, what you were trying to do when the problem occurred and the frequency of the problem.

Major and Minor Method Changes

In previous versions of the Agilent Drivers for Thermo Chromeleon 7 so-called “soft configuration” parameters, which are changeable in the method editor, were reported as “minor incompatibilities” with the existing GC configuration. This prevented these methods from being used without first resolving the method (changing the soft configuration parameters) or updating the existing GC configuration.

Starting with version 2.3 of the Agilent Drivers for Thermo Chromeleon 7 those incompatibilities will no longer need to be resolved and thus can be used without requiring any changes.

This change includes the following settings:

- Column changes
  - Presence or absence
  - Type change (even if same dimensions)
  - Connections
  - Dimensions
  - Calibration
- ALS
  - Syringe Size
  - Nanoliter Adapter presence
  - Solvent Mode
- Gas types
  - Gas sources (inlets, EPC modules)
  - Detector gases
- Any valve change (presence, type, configuration)

By contrast, anything that the GC can determine independently of external software is considered a major inconsistency and will still require (manual) resolution. These settings are read-only and can only be changed by physically altering the GC.

- ALS
  - Different tower or tray model
  - Removal of tower or tray
- Different (oven) cryo type
- Valve Box presence
- Helium Conservation Module presence
- Gas Source (inlet, EPC module) or Detector module presence
- Aux Heater presence
- Different module type (inlet, detector)

NOTE On GC systems configured for dual simultaneous injections the minor changes will only be updated for the instrument which was created first during configuration. To ensure all changes are correctly propagated the instrument should be reconfigured even after minor changes. Systems which do not use dual simultaneous injection mode do not need to be reconfigured in such cases.

Known Issues

The below table lists known issues for this release of the Agilent Drivers. For the full lists of issues refer to the SSB's for the used components. Information related to SSB is also available on www.agilent.com.

ICF:
https://www.agilent.com/cs/library/support/Patches/SSBs/Agilent_Instrument_Control_Framework_(ICF).html

LC Drivers:

https://www.agilent.com/cs/library/support/Patches/SSBs/LC_RC_Net.html

ELSD Drivers:

https://www.agilent.com/cs/library/support/Patches/SSBs/PL29ELSD.html

GC Drivers:

https://www.agilent.com/cs/library/support/Patches/SSBs/Agilent_GC_Drivers_Software.html

HS - ICF Drivers:

https://www.agilent.com/cs/library/support/Patches/SSBs/ICF-Headspace.html

Table 2 Known Issues

Key	Summary
142618	Incorrect tool tip warning (G7161B)
143655	Harmonize on/off behaviour on ePanels
148238	Tool tip warning with incorrect flow range (G7161B)
174683	ePanel - Field Size for "Display" and "Device Name" is too short
178186	Typo in RID ePanel "Receycling"
182912	G7129C - Description of the Sample Position in Driver Message is not clear
237931	ValidateSequence succeeds even blank run is used in full sequence
254496	9000 GC: Config Changed Event not raised to DSA
263510	OutOfmemory Chromeleon.exe while processing highest data rate on GC
275785	2 empty IQT folder left after Agilent Driver uninstallation
282382	LC Column Comp ePanel: Overlapping numbers on temperature scale and missing unit
287524	Ready Check fails to detect not-supported Headspace blank run
411919	8860 will not go ready when the gas saver option is activated although "preprun on manual request" is set
542494	HSS 8697 Status XML exceeds 1MB after 83rd run in a sequence
552868	6890 Prep Run not working
582153	6890 Signal association causes method check warning
642512	CM7-issue. Manual injector, sequence lines contain wrong vial and volume information and ready check passes

Resolved Issues

Table 3 Resolved Issues

Key	Description
553903	Soft Config shown enabled even instrument started disconnected
546699	HSS 8697: "Sequence ends in" Clock runs down to 0 before 1st injection while cooling oven
508994	After "Downgrading" DualConfig to SingleConfig sequence execution not starting
269169	ELSD merge module: SVT does not check all registry entries created by Agilent Drivers

Supported Agilent Modules and Firmware

NOTE

The Agilent LC drivers are backwards compatible. Modules with identical Product Numbers are supported, even if the tables below list only the name of the current model version. 1100 Series models are supported on a best effort basis only. For more details, please refer to the driver Release Notes of the driver revision you are using.

Table 4 Pumps

Module No.	Module Name	Min. Firmware	Min. Version of Agilent Drivers
G1310A	1200 Isocratic Pump	A.06.10	1.1
G1310B	1260 Infinity Isocratic Pump	A.06.32	1.1
G1311A	1200 Series Quaternary Pump*	A.06.10	1.1
G1311B	1260 Infinity Quaternary Pump*	A.06.32	1.1
G1311C	1260 Infinity Quaternary Pump VL*	A.06.32	1.1
G1312A	1200 Series Binary Pump*	A.06.10	1.1
G1312B	1260 Infinity Binary Pump*	A.06.10	1.1
G1312C	1260 Infinity Binary Pump VL*	A.06.32	1.1
G1361A	1260 Infinity Preparative Pump	A.06.50	1.1
G1376A	1260 Infinity Capillary Pump	A.06.10	1.1
G2226A	1260 Infinity Nanoflow Pump	A.06.10	1.1
G4204A	1290 Infinity Quaternary Pump*	B.06.50	1.1
G4220A	1290 Infinity Binary Pump*	B.06.23	1.1
G4220B	1290 Infinity Binary Pump VL*	B.06.43	1.1
G4302A	1260 Infinity SFC Binary Pump*	A.06.32	1.1
G4782A	1260 Infinity II SFC Binary Pump*	D.07.13	1.2
G5611A	1260 Infinity Bio-inert Quaternary Pump*	A.06.32	1.1
G5654A	1260 Infinity II Bio-Inert Quaternary Pump*	D.07.01	1.1
G7104A	1290 Infinity II Flexible Pump*	B.06.71	1.1
G7104C	1290 Infinity II Flexible Pump*	B.07.20	1.2
G7110B	1260 Infinity II Isocratic Pump	D.07.01	1.1
G7111A	1260 Infinity II Quaternary Pump VL*	D.07.01	1.1
G7111B	1260 Infinity II Quaternary Pump VL*	D.07.01	1.1
G7112B	1260 Infinity II Binary Pump*	D.07.01	1.1
G7120A	1290 Infinity II High Speed Pump*	B.06.71	1.1
G7161A	1260 Infinity II Preparative Binary Pump	D.07.20	1.2
G7161B	1290 Infinity II Preparative Binary Pump	D.07.20	1.2
Cluster			
N/A	Pumps marked with * can create a pump valve cluster with up to two valves of type G1160A and/or G1170A with 5067-4159 or 5067-4147	See modules	1.1
N/A	1260 Infinity Preparative Pump Cluster with up to four G1361A	A.06.50	1.1

Table 5 Injectors

Module No.	Module Name	Min. Firmware	Min. Version of Agilent Drivers
G1328A/B	Manual Injector	N/A	2.5
G1330A/B	Thermostat for Agilent Sampler	N/A	1.1.
G1313A	1100 Series Autosampler	A.06.10	1.1
G1329A	1200 Series Standard Autosampler	A.06.10	1.1
G1329B	1260 Infinity Standard Autosampler	A.06.10	1.1
G1367A	1100 Series Well-plate Autosampler	A.06.31	1.1
G1367B	1200 Series High Performance Autosampler	A.06.31	1.1
G1367C	1200 Series High Performance Autosampler SL	A.06.31	1.1
G1367D	1200 Series High Performance Autosampler SL+	A.06.31	1.1
G1367E	1260 Infinity High Performance Autosampler	A.06.32	1.1
G1377A	1260 Infinity High Performance Micro Autosampler	A.06.12	1.1
G1389A	1100 Series Micro Thermostated Autosampler	A.06.10	1.1
G2258A	1260 Infinity Dual-Loop Autosampler	A.06.50	1.1
G2260A	1260 Infinity Preparative Autosampler (High flow)	A.06.50	1.1
G4226A	1290 Infinity Autosampler	A.06.31	1.1
G4303A	1260 Infinity SFC Standard Autosampler	A.06.54	1.1
G4767A	1260 Infinity II SFC Multisampler	D.07.13	1.2
G5667A	1260 Infinity Bio-inert High Performance Autosampler	A.06.32	1.1
G5668A	1260 Infinity II Bio-inert Multisampler	D.07.01	1.1
G7129A	1260 Infinity II Vialsampler	D.06.60	1.1
G7129B	1290 Infinity II Vialsampler	D.06.60	1.1
G7129C	1260 Infinity II Vialsampler	D.07.20	1.2
G7157A	1260 Infinity II Preparative Autosampler	D.07.01	1.2
G7167A	1260 Infinity II Multisampler	D.06.60	1.1
G7167B	1290 Infinity II Multisampler	D.06.60	1.1

Supported Agilent Modules and Firmware

Table 6 Detectors

Module No.	Module Name	Min. Firmware	Min. Version of Agilent Drivers
G1314A	1100 Series Variable Wavelength Detector	A.06.10	1.1
G1314B	1260 Infinity Variable Wavelength Detector VL	A.06.10	1.1
G1314C	1260 Infinity Variable Wavelength Detector VL+	A.06.10	1.1
G1314D	1200 Series Variable Wavelength Detector	B.06.32	1.1
G1314E	1290 Infinity Variable Wavelength Detector	B.06.32	1.1
G1314F	1260 Infinity Variable Wavelength Detector	B.06.32	1.1
G1315A	1100 Series Diode Array Detector	A.06.10	1.1
G1315B	1200 Series Diode Array Detector	A.06.10	1.1
G1315C	1260 Infinity Diode Array Detector VL+	B.06.30	1.1
G1315D	1260 Infinity Diode Array Detector VL	B.06.30	1.1
G1365A	1100 Series Multiple Wavelength Detector	A.06.10	1.1
G1365B	1200 Series Multiple Wavelength Detector	A.06.10	1.1
G1365C	1260 Infinity Multiple Wavelength Detector	B.06.30	1.1
G1365D	1260 Infinity Multiple Wavelength Detector VL	B.06.30	1.1
G1321A	1200 Series Fluorescence Detector (FLD)	A.06.10	1.1
G1321B	1260 Infinity Fluorescence Detector Spectra	A.06.32	1.1
G1321C	1260 Infinity Fluorescence Detector	A.06.54	1.1
G1362A	1260 Infinity Refractive Index Detector	A.06.10	1.1
G4212A	1290 Infinity Diode Array Detector	B.06.30	1.1
G4212B	1260 Infinity Diode Array Detector	B.06.30	1.1
G7114A	1260 Infinity II Variable Wavelength Detector	D.07.01	1.1
G7114B	1290 Infinity II Variable Wavelength Detector	D.06.70	1.1
G7115A	1260 Infinity II Diode Array Detector WR	D.07.01	1.1
G7117A	1290 Infinity II Diode Array Detector FS	D.06.70	1.1
G7117B	1290 Infinity II Diode Array Detector	D.06.70	1.1
G7117C	1260 Infinity II Diode Array Detector HS	D.07.01	1.1
G7121A	1260 Infinity II Fluorescence Detector	D.07.01	1.1
G7121B	1260 Infinity II Fluorescence Detector Spectra	D.07.01	1.1
G7165A	1260 Infinity II Multi Wavelength Detector	D.07.01	1.1
G4218A	1260 Infinity Evaporative Light Scattering Detector	N/A	Not supported
G4260A	380-ELSD	25.00	1.1
G4261A	385-ELSD	25.00	1.1
G4260B	1260 Infinity II Evaporative Light Scattering Detector	32.06	1.1
G4261B	1290 Infinity Evaporative Light Scattering Detector	32.06	1.1
G7102A	1290 Infinity II Evaporative Light Scattering Detector	32.06	1.1
G7162A	1260 Infinity II Refractive Index Detector	D.06.76	1.1
G7162B	1290 Infinity II Refractive Index Detector	D.06.76	1.1
Cluster			
HDR-DAD	2 × G4212A or 2 × G4212B or a combination of 1x G4212A and 1x G4212B	B.06.57	1.1

Table 6 Detectors

HDR-DAD	2 × G7117A or 2 × G7117B or a combination of 1xG7117A and 1xG7117B	B.06.70	1.1

Table 7 Column Compartments

Module No.	Module Name	Min. Firmware	Min. Version of Agilent Drivers
G1316A	1260 Infinity Thermostated Column Compartment	A.06.10	1.1
G1316B	1200 Series Thermostated Column Compartment SL	A.06.10	1.1
G1316C	1200 Series Thermostated Column Compartment SL	A.06.14	1.1
G7116A	1260 Infinity II Multicolumn Thermostat	D.07.01	1.1
G7116B	1290 Infinity II Multicolumn Thermostat (Host with firmware B.06.75/D.06.75 required)	C.06.70	1.1
G7130A	Integrated Column Compartment ICC (option to G7129A/B)	C.06.76	1.1
Cluster			
N/A	Cluster with up to three G1316C with integrated 8-pos/9-port valves (product G4230A/B) or a minimum of two G13161C TCCs; the third TCC can be a G1316A, B or C.	See module	1.1
	The Valve Thermostat Cluster is a combination of G7116B, G1170A and G1316C as valve or column hosts and G1316A/B and G7130A as column hosts.		

Table 8 Valve Hosts and Valves

Module No.	Module Name or Min. Module Firmware	Min. Host Module Firmware	Min. Version of Agilent Drivers
G7116B	C.06.75	B.06.75/D.06.75	1.1
G1170A	C.06.75	B.06.75/D.06.75	1.1
G7130A (option of G7129A/B)	D.06.76	N/A	1.1
G1316C	A.06.55	N/A	1.1
G1316A/B	A.06.10	N/A	1.1
G1157A	1200 Series 2-Position/10-Port Valve	A.06.02	1.1
G1158A	1200 Series 2-Position/6-Port Valve	A.06.02	1.1
G1158B	1200 Series 2-Position/6-Port Valve (600bar)	A.06.02	1.1
G1159A	1200 Series 6-Position Selection Valve	A.06.02	1.1
G1160A	1100 Series Multiple Purpose Switching Valve (12-Position/13-Port)	A.06.02	1.1
G1162A	1200 Series 2-Position/6-Port Micro Valve	A.06.02	1.1
G1163A	1200 Series 2-Position/10-Port Micro Valve	A.06.02	1.1
G1170A	1290 Infinity Valve Drive (Host required with firmware B.06.40/D.06.060)	C.06.40	1.1

Table 9 Other Modules

Module No.	Module Name or Min. Module Firmware	Min. Host Module Firmware	Min. Version of Agilent Drivers
G1390A	1100 Series Universal Interface Box (UIB)	A.06.02	1.1
G1390B	1200 Infinity Series Universal Interface Box II (Host required with B.06.53 firmware)	C.06.53	1.1
G4227A	1290 Infinity Flexible Cube (Host required with B.06.52 firmware)	C.06.52	1.1
G1364A	1100 Series Automatic Fraction Collector	N/A	Not supported
G1364B	1260 Infinity Fraction Collector (preparative-scale)	N/A	Not supported
G1364C	1260 Infinity Fraction Collector (analytical-scale)	N/A	Not supported
G1364D	1100 Series Micro Fraction Collector	N/A	Not supported
G5664A	1260 Infinity Bio-inert fraction collector AS	N/A	Not supported
G4240A	1260 Infinity Chip Cube MS Interface	N/A	Not supported
G4301A	1260 Infinity Analytical SFC System	N/A	1.1
G7170B	1290 Infinity II MS Flow Modulator	N/A	1.2
Cluster			
N/A	Any combination of G1364A/B/C or G566A plus a fourth G1364A/B/C or G5664A for recovery can be clustered. Multiple single Fraction Collectors are not supported	See module	Not supported

Table 10 Compact LC

Module No.	Module Name or Min. Module Firmware	Min. Firmware	Min. Version of Agilent Drivers
G4286A	1120 LC Isocratic	B.06.50	1.1
G4286B	1220 LC System Isocratic, Man. Inj., VWD, 600 bar	N/A	Not supported
G4287A	1120 LC Isocratic with Oven and ALS	B.06.50	1.1
G4287B	1220 LC Isocratic, ALS, TCC, VWD, 600 bar	B.06.50	1.1
G4288A	1120 LC Gradient	B.06.50	1.1
G4288B	1220 LC Gradient, Man. Inj., VWD, 600 bar	N/A	Not supported
G4289A	1120 LC Gradient with Oven	B.06.50	1.1
G4289B	1220 LC Gradient, ALS, TCC, VWD, 600 bar	B.06.50	1.1
G4290A	1120 LC Gradient with oven and ALS	B.06.50	1.1
G4290B	1220 LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar	B.06.50	1.1
G4291B	1220 LC Isocratic, Man. Inj., TCC, VWD, 600 bar	N/A	Not supported
G4292B	1220 LC Isocratic, ALS, VWD, 600 bar	B.06.50	1.1
G4293B	1220 LC Gradient, ALS, VWD, 600 bar	B.06.50	1.1
G4294B	1220 LC Gradient, ALS, TCC, DAD, 600 bar	B.06.50	1.1
G4288C	1220 LC System VL Gradient, Man. Inj. VWD, 400 bar	N/A	Not supported
G4289C	1220 LC System VL Gradient, Man. Inj. VWD, 400 bar	N/A	Not supported
G4290C	1220 LC System VL Gradient, ALS, TCC, VWD, 400 bar	B.06.50	1.1
G4293C	1220 LC System VL Gradient, ALS, VWD, 400 bar	B.06.50	1.1

Table 11 Capillary Electrophoresis

Module No.	Module Name or Min. Module Firmware	Min. Firmware	Min. Version of Agilent Drivers
G7150A	G7100 Capillary Electrophoresis II	N/A	Not supported
G7151A	Diode Array Detector for CE	N/A	Not supported

Table 12 Driver Features and Special Solutions

Feature	Feature Name	Min. Firmware	Min. Version of Agilent Drivers
Additional Driver Features	External Contacts Board G1351A	N/A	1.1
Additional Driver Features	Blend Assist	N/A	Not supported
Additional Driver Features	ISET G2197AA I	N/A	1.1
Additional Driver Features	ISET G2197AA II	N/A	1.1
Additional Driver Features	ISET G2197AA III	N/A	1.1
Additional Driver Features	ISET G2197AA IV	N/A	1.1
Special Solutions	Buffer Advisor (G5617AA)	N/A	1.1 (Import buffer files)
Special Solutions	2DLC (G2198AA)	N/A	Not supported
Special Solutions	Method Scouting Wizard (G2196AA)	N/A	Not supported
Special Solutions	Automated Purification Software (M8368/M8369AA)	N/A	Not supported

Table 13 Supported Gas Chromatographs, Inlets, and Detectors

	Module Type	Inlets	Detectors
8890	G3540A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
	G3542A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
	G3543A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
	G3545A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
8860	G2790A	S/S, P/P, COC, PCI	TCD, FID, NPD, µECD, FPD,
			FPD+
Intuvo 9000	G3950A	S/S, MMI	TCD, FID, NPD, FPD ECD,
			µECD, NCD, SCD
	G3952A	S/S, MMI	TCD, FID, NPD, FPD ECD,
			µECD, NCD, SCD
	G3953A	S/S, MMI	TCD, FID, NPD, FPD ECD,
			µECD, NCD, SCD
7890B & 7890A+	G3440B	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
	G3442B	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
	G3443B	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD

	G3445B	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB, NCD, SCD
7890A	G3440A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB
	G3442A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB
	G3443A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB
	G3445A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI, MMI, HT-PTV	µECD, Dual W FPD, AIB
7820	G4350A	S/S, P/P, COC, PCI	TCD, FID, NPD, µECD, FPD,
			FPD+
6890A	G1530A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
	G1540A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
6890Plus	G1530A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
	G1540A	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
6890N	G1530N	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
	G1540N	S/S, P/P, COC, PTV,	TCD, FID, NPD, FPD ECD,
		PCM, VI	µECD, Dual W FPD, AIB
6850	G2630A/B	S/S, P/P, COC, PTV	TCD, FID, NPD, FPD ECD, AIB

Table 14 Gas Chromatographs and Hardware Required Firmware and Agilent Drivers

Module No.	Module Name	Min. Firmware	Min. Version of Agilent Drivers
G1530N	6890N	N.06.07	2.1
G1540N	6890N	N.06.07	2.1
G1530A	6890A	A.03.8	2.1
G1540A	6890Plus	A.03.8	2.1
G2630A	6850A (Serial Number >= US10243001)	A.06.02	2.1
G2630A	6850A (Serial Number <= US00003200)	A.03.07	2.1
G2790A	8860 GC	1.0	2.1
G3540	8890 GC	1.0	2.1
G3650A	Intuvo 9000 GC	A.01.04	2.0
G3952A	Intuvo 9000 GC	A.01.04	2.0
G3953A	Intuvo 9000 GC	A.01.04	2.0
G3440B	7890B GC	B.02.03.2	2.0
G3445B	7890B GC	B.02.03.2	2.0
G3440A	7890A GC	A.01.16	2.0
G3445A	7890A GC	A.01.16	2.0

Table 14 Gas Chromatographs and Hardware Required Firmware and Agilent Drivers

G4350A	7820A GC	A.01.15.012	2.0
G4567A	7650 GC ALS Injector	A.10.02	2.0
G4513A	7693 GC ALS Injector	A.10.08	2.0
G4514A	7693 GC ALS Tray	A.10.16	2.0
G4515A	7693 GC ALS BCR/Mixer	A.10.04	2.0
G4516A	7693 GC ALS External Controller	A.01.06	2.0
G4517A	7693 GC ALS Injector 6890Plus ALS card upgrade	A.01.06	2.0
G4521A	7693 GC ALS LVI Syringe Carriage	N/A	2.0
G4522A	7693 GC ALS Cooling Accessory	N/A	2.0
G4520A	7693 GC ALS Tray with BCR Mixer	A.10.16	2.0
G2913A	7683B GC ALS Injector	A.11.03	2.0
G2614A	7683B GC ALS Tray	A.02.01	2.0
G2615A	7683B GC ALS BCR/Mixer	N/A	2.0
G2613A	7683A GC ALS Injector	A.10.07	2.0
G2614A	7683A GC ALS Tray	A.02.01	2.0
G2615A	7683A GC ALS BCR/Mixer	N/A	2.0

Table 15 Supported Headspace Hardware

	Module Type	Description	FW Revision	Min. Version of Agilent Drivers
7697A	G4557A	7697A Headspace Sampler, 111 vial	A.01.08.2	2.1
	G4556A	7697A Headspace Sampler, 12 vial	A.01.08.2	2.1
8697	G4511A	G4511A Headspace Sampler	1.1.0.34	2.4

Changelog

Agilent Drivers for Chromeleon 2.4 - What's new?

8697 Headspace Sampler Support

This release of the Agilent Drivers for Thermo Chromeleon adds support for the 8697 headspace sampler.

Dynamic Licensing

The Agilent Drivers for Chromeleon will now request a class 3 license for LC instruments and a class 2 license for GC instruments. This is, however, dependent on the version of Chromeleon in use. Any Chromeleon version up to and including 7.2.10 MUa and 7.3 will request a class 3 license for a GC where normally only a class 2 would be required. Versions released after these will request the class 2 license as expected. Please contact your Thermo Scientific representative for the correct license if using those versions.

GCs configured in dual sequence mode will request only one license.

Updated GC and HS Drivers

This release of the Agilent Drivers for Chromeleon include GC Driver version 3.5 SR1 and HS driver version 3.5 SR1.

Agilent Drivers for Chromeleon 2.3 - What's new?

Dual Simultaneous Injection

This release of the Agilent Drivers for Thermo Chromeleon introduces the Dual Simultaneous Injection feature for GCs. It is now possible to inject two samples simultaneously on the front and back injector thereby improving GC utilization.

The feature is available for 6890, 7890, and 8890 GC models.

Simplified GC online method access

The GC online method is now accessible via one click on the status dashboard thereby reducing the number of steps required to open the online method user interface.

Adding Sequence Lines to running sequences

It is now possible to add sequence lines to a sequence whose last run has already started.

Dynamic Licensing

The Agilent Drivers for Chromeleon will now request a class 3 license for LC instruments and a class 2 license for GC instruments. This is, however, dependent on the version of Chromeleon in use. Any Chromeleon version up to and including 7.2.10 MUa and 7.3 will request a class 3 license for a GC where normally only a class 2 would be required. Versions released after these will request the class 2 license as expected. Please contact your Thermo Scientific representative for the correct license if using those versions.

GCs configured in dual sequence mode will request only one license.

Column handling

Changing the installed columns in the GC online method no longer triggers a method resolution. Previously a change in the column configuration required a manual method resolution. Now the same method can be used without manual intervention.

LC and GC User Guides

The Agilent Drivers for Thermo Chromeleon now includes a user guide for LC and a separate user guide for GC.

Extended configuration audit trail

The configuration audit trail now logs all information available in the configuration report. Previously only the ICF information was available

Custom name handling

Customized names set during configuration, e.g., signal names, now are retained during reconfiguration. This eliminates the need to re-enter the custom names when a change in the configuration is made.

Defect fixes

Resolved issues are listed in this document in the chapter Resolved Issues.

Agilent Drivers for Chromeleon 2.2 - What's new?

- Multiple GC injectors on one instrument are now supported
- Manual injection for GC is now supported
- Manual method resolution for GC methods is now available
- Use of more than one GC simultaneously now possible

Agilent Drivers for Chromeleon 2.1 - What's new?

- New GC instrumentation
  - 8890 GC
  - 8860 GC
  - 6890 GC
  - 6850 GC
- New Agilent GC-HS driver 3.0
- Defect fix

Agilent Drivers for Chromeleon 2.0 – What's new?

- New GC instrumentation
  - Intuvo 9000 GC

  - 7890A GC
  - 7890B GC
  - 7820A GC
  - 7697A Headspace Sampler
- Method Migration
- Methods from ICF or previous Agilent Drivers version can be migrated to the current version
- Support for Sample Thermostat G7167-60100 for Multisampler and Vialsampler

Agilent Drivers for Chromeleon 1.2 – What´s new?

- New LC instrumentation
  - G4782A 1260 Infinity II SFC Binary Pump
  - G4767A 1260 Infinity II SFC Multisampler
  - G7161A 1260 Infinity II Preparative Binary Pump
  - G7161B 1290 Infinity II Preparative Binary Pump
  - G7170B 1290 Infinity II MS Flow Modulator
  - G7129C 1260 Infinity II Vialsampler
  - G7104C 1260 Infinity II Flexible Pump
  - G4260B 1260 Infinity II Evaporative Light Scattering Detector with LAN connection
  - Prep 6-column selector valve head 5067-4267
  - G4232E (5067-4283) 2pos/10port Valve head 800 bar
  - G4234D (5067-4284) 6 column selector 800 bar with different port layout
  - G4237D (5067-4279) 4-column selector 800 bar
  - G4231D (5067-4282) 2pos/6port Valve Head 800 bar
  - new characterizations for ISET 4.2 (support for G7104C)
  - Shutdown Method
  - Enables the user to shut down the pump and detector lamp after a run.
  - Direct Actions
  - Enables the user (expert permissions) to execute direct actions via the command tree or to place them on an ePanel.
  - Improvements in timetable handling
  - Invalid timetable script changes are notified in more detail at method check.

Agilent Drivers for Chromeleon 1.1 – Features

The Agilent Drivers for Chromeleon 7 supports the following features:

- Support for the following Agilent LC Systems and Modules:
- 1220/1260/1290 Agilent Infinity II LC
- 1220/1260/1290 Agilent Infinity LC
- 1100/1200 Series and 1120

Changelog

- Chromeleon specific user experience to control Agilent LC equipment, as these drivers offer a new look and feel similar to the previous look and feel of the Chromeleon Native Driver for Agilent LC instrumentation
- ePanels for each module class
- In addition to the Home ePanel offering the LC Instrument Control Dashboard module ePanels are now available. There is one ePanel available for each module class, which can be customized to fit the configuration in use.
- Independent module access in instrument method tree
- The instrument method offers all modules as a separate unit enabling direct access and allowing method creation via the guided method wizard.
- Chromeleon specific command handling
- The Command Tree offers Agilent method parameters.
- The Chromeleon method script includes the Agilent instrument method parameters now in scripted format.
- Timetable parameters listed in method script´s “Run stage” in order of their execution.
- Enabling full feature set for custom variables handling in method script.
- Elimination of duplicate entries
- One entry for overall run time/stop time.
- Injection volume defined by sequence only (manual overwrite with script possible).
- Alignment of status information
- Agilent LC Status Dashboard runtime / Chromeleon runtime information
- Agilent LC Status Dashboard colored status / Chromeleon colored status information
- Audit trail captures changes falling within and outside a run on module level
- Data Audit Trail for Instrument Method
- Using the enabled versioning and data audit trails is now possible to perform a method comparison of different versions via the scripted method and no longer in an ICF specific view.
- Enabling development of shutdown method to switch off lamps or pumps at end of the sequence
- Sequence handling
- Acts as master for injection volume (manual overwrite via method script possible).
- Improved overlapped injection
- Performance improvements
- The performance of the graphical user interface components, e.g. close/open method windows has been improved.
- Partially available Method Migration
- User guidance migrating previously created methods using Instrument Control Framework (ICF) is given, the resulting method continues to work with the scripted method (minor manual interaction still required).
- No complete method migration possible due to the revised command naming structure. However, all incompatible commands are marked red and can easily be transferred manually.

The Agilent Drivers for Chromeleon 7 do not support the following features:

- Manual Injection
- Mixed LC systems (Agilent and Non-Agilent LC systems)
- Blend Assist
- This pump feature is offered by the LC driver, but it is not supported in this release.

For a full list of known limitations consult the user guide.

Appendix A

Table 16 Registry entries not listed by SVT report on a 32-bit system

Registry key	Location under HKEY_LOCAL_MACHINE\SOFTWARE
Ag7697WS	
GCPackage	Agilent Technologies\Instrument Control Framework
Installationdirectory	Agilent Technologies\Instrument Control Framework\GCPackage
Versionmajor	Agilent Technologies\Instrument Control Framework\GCPackage
Versionminor	Agilent Technologies\Instrument Control Framework\GCPackage

Table 17 Registry entries not listed by SVT report on a 64-bit system

Registry key	Location under HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\agilent
Ag7697WS	
GCPackage	Agilent Technologies\InstrumentControlFramework\GCpackage
Installationdirectory	Agilent Technologies\InstrumentControlFramework\GCpackage
Versionmajor	Agilent Technologies\InstrumentControlFramework\GCpackage
Versionminor	Agilent Technologies\InstrumentControlFramework\GCpackage

Table 18 Registry keys not reported in SVT report

Key not reported in SVT report	Registry folder below HKEY_LOCAL_MACHINE\SYSTEM\CURRENTCONTROLSET\SERVICES
EVENTMESSAGEFILE	EVENTLOG\APPLICATION\AGGC68XXDRV
EVENTMESSAGEFILE	EVENTLOG\APPLICATION\AGGC7890DRV
EVENTMESSAGEFILE	EVENTLOG\APPLICATION\AGGCDATASYSTEMADAPTER

Table 19 SVT reference files not reported by SVT report placed in ADC installation folder

File not reported in SVT report	Installed under directory C:\Program Files (x86)\Agilent Technologies
IQTRefRapidControlIF.xml	IQTool\IQProducts\Agilent Rapid Control .NET
IQTRefICFMerge.xml	IQTool\IQProducts\Agilent Drivers for Thermo Chromeleon
GC_Drivers_RefFile.xml	Agilent Drivers for Thermo Chromeleon\Instrument Control Framework\IQTWizard\RefFiles
IQTRefELSDDrivers.xml	Agilent Drivers for Thermo Chromeleon\Instrument Control Framework\IQTWizard\RefFiles
IQTRefICFMerge.xml	Agilent Drivers for Thermo Chromeleon\Instrument Control Framework\IQTWizard\RefFiles
IQTRefLCDrivers.xml	Agilent Drivers for Thermo Chromeleon\Instrument Control Framework\IQTWizard\RefFiles
IQTRefRapidControlIF.xml	Agilent Rapid Control .NET
IQTRefRapidControlSampleContainerManager.xml	Agilent Rapid Control .NET

Appendix A

Table 20 SVT reference files not reported by SVT report placed in Chromeleon installation path

File not reported in SVT report	Installed under directory C:\PROGRAM FILES (X86)\THERMO\CHROMELEON\BIN
Agilent_Drivers_for_Thermo_Chromeleon.xml	DDK\V1\Drivers\AgilentTechnologies\RefFiles
IQTRefAgilentDriversforThermoChromeleon.xml	DDK\V1\Drivers\AgilentTechnologies\RefFiles

Appendix B

Warnings
Agilent Drivers for Thermo Chromeleon: A newer version of the package is installed. Expected version 1.2.16.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkAssemblyResolve.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkConfigurationPlugin.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommon.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCore.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkResourceRuleProvider.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.ResourceRuleCommon.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.Utils.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\DdkConfigurationPlugin.bmp: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\DriverCert.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Help\ThermoChromeleonEnu.chm: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RefFiles\Agilent_Drivers_for_Thermo_Chromeleon.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RefFiles\IQTRefAgilentDriversforThermoChromeleon.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\AFC ClusterRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\AFCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ALSRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\BINPUMPRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CCCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCColumnCompRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCDAD_BRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCGradPump_BRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCGradPumpRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCIsoPump_BRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCIsoPumpRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCSampler_BRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCSamplerRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCVWD_BRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCVWDRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\DADRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\DriverActions.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD1260Rules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD1290Rules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD38xRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FLDRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FLEXCUBERules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FlowModulatorRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\HDRRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\HIPALSRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ISOPUMPRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWAFCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWALSRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWHIPALSRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWPUMPRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWVALVERules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\MWDRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPPUMPCLUSTERRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPPUMPRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPSAMPLERRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PVCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\QUATPUMPRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\RcDriverActions.xsd: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ResourceRuleDefinition.xsd: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\RIDRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\SFCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\TCCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\UIBRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VALVERules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VTCRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VWDRules.xml: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.CommonResources.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkAssemblyResolve.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkGenControl.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommon.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommonV2.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkMethodEditorPlugin.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.Utils.dll: The file was not installed by any of the known packages.
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\DriverCert.xml: The file was not installed by any of the known packages.

Appendix B

Table 21 List of files reported in the Chromeleon IQ

Filename
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkAssemblyResolve.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkConfigurationPlugin.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommon.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCore.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkResourceRuleProvider.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.ResourceRuleCommon.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.Utils.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\DdkConfigurationPlugin.bmp
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\DriverCert.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\Help\ThermoChromeleonEnu.chm
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RefFiles\Agilent_Drivers_for_Thermo_Chromeleon.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RefFiles\IQTRefAgilentDriversforThermoChromeleon.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\AFC ClusterRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\AFCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ALSRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\BINPUMPRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CCCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCColumnCompRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCDAD_BRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCGradPump_BRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCGradPumpRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCIsoPump_BRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCIsoPumpRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCSampler_BRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCSamplerRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCVWD_BRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\CompactLCVWDRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\DADRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\DriverActions.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD1260Rules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD1290Rules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ELSD38xRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FLDRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FLEXCUBERules.xml

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C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\FlowModulatorRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\HDRRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\HIPALSRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ISOPUMPRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWAFCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWALSRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWHIPALSRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWPUMPRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\LOWFLOWVALVERules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\MWDRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPPUMPCLUSTERRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPPUMPRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PREPSAMPLERRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\PVCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\QUATPUMPRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\RcDriverActions.xsd
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\ResourceRuleDefinition.xsd
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\RIDRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\SFCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\TCCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\UIBRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VALVERules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VTCRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V1\Drivers\AgilentTechnologies\RuleData\VWDRules.xml
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.CommonResources.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkAssemblyResolve.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkGenControl.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommon.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkIcfCommonV2.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.DdkMethodEditorPlugin.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\Agilent.IcfAdapter.Chromeleon.Utils.dll
C:\Program Files (x86)\Thermo\Chromeleon\Bin\DDK\V2\Drivers\AgilentTechnologies\DriverCert.xml

In This Book

The release note describes the following:

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Edition 05/2022
D0021125

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