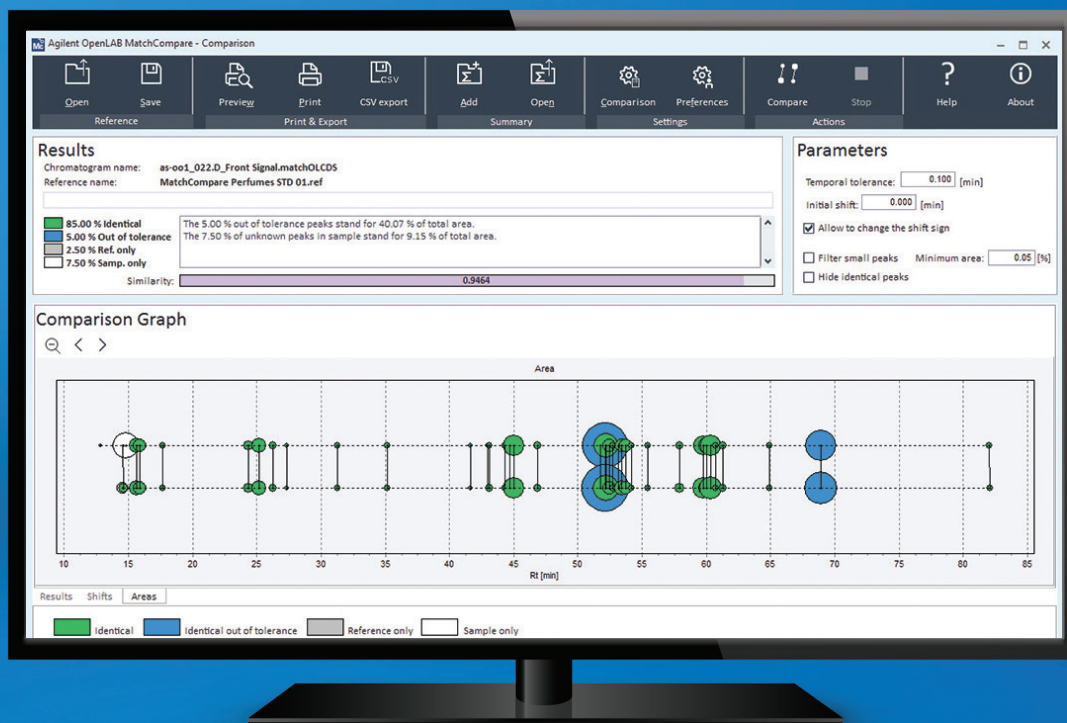


Save Time by Streamlining Quality Control

Agilent OpenLab CDS MatchCompare A.01.03.1



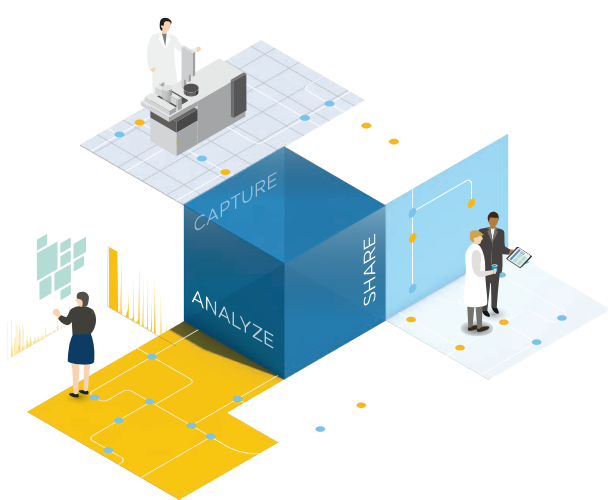


Make Quick, Rigorous Comparisons Between Standard and Reference Chromatograms

Agilent OpenLab CDS MatchCompare automates the time-consuming task of comparing quality control chromatograms. Originally developed to help chromatographers identify small differences between two chromatograms, it is also applicable to a wide range of samples where an overall “A/B” comparison is desired.

By objectively comparing unknown samples to a known standard, MatchCompare quickly identifies similar chromatographic peaks between two chromatograms, and compares areas against predetermined ranges. This quality control process provides higher throughput for many GC and LC applications.

In addition to quantifying individual components, chromatographers must frequently compare two different samples, or a sample to a reference, focusing on the overall chromatogram fingerprint. Typically, this is achieved by overlaying the chromatograms to manually examine the chromatographic traces and judge how well the two chromatograms match. This method provides a subjective comparison, which relies on years of training and experience.



Make comparisons based on retention index with OpenLab CDS 2

Agilent OpenLab CDS MatchCompare A.01.03.1 offers compatibility with OpenLab CDS 2.x while retaining compatibility with Agilent ChemStation and Agilent EZChrom Editions. When combined with OpenLab CDS 2, OpenLab CDS MatchCompare uses the custom calculator feature to enable comparisons based on both retention indices and retention times.

Highlights:

- Integrate seamlessly with OpenLab CDS
- Quickly identify and match peaks between two complex samples
- Monitor product content uniformity by peak area comparison
- Save time with automated product-conformity reports
- Increase efficiency by eliminating reference sample reinjection

Compare Major Components and Trace Compounds



One of the most important features of MatchCompare is its ability to compare both major components and trace compounds. This capability makes the application an ideal tool for any screening application where consistency is critical.

Results

Chromatogram name: as1b_008_D_Front Signal.matchOLCDS
Reference name: MatchCompare Perfumes STD 01.ref

77.08 % Identical
4.17 % Out of tolerance
8.33 % Ref. only
10.42 % Samp. only

Similarity: 0.9474

The 4.17 % out of tolerance peaks stand for 0.35 % of total area.
The 10.42 % of unknown peaks in sample stand for 0.19 % of total area.

Parameters

Temporal tolerance: 0.100 [min]
Initial shift: 0.000 [min]
 Allow to change the shift sign
 Filter small peaks Minimum area: 0.05 [%]
 Hide identical peaks

Result Table

Name	Rt Samp	Rt Ref [min]	DT	% Samp	% Ref	% Error	Tol [%]	Info	Remarks
Unknown	2.2135	2.2136	-0.0001	93.9939	94.0921	-0.10	6.00	id., Tall peak	
Unknown	2.2628	2.2631	-0.0003	0.4132	0.3283	25.84	15.00	id.	Id. OT
Unknown	2.3419	2.3420	-0.0001	0.0478	0.0481	-0.49	30.00	id.	
Unknown	2.5448	-----	-----	-----	0.0042	0.00	30.00	Ref.	
Unknown	2.6255	-----	-----	0.0308	-----	-----	-----	Samp.	
Unknown	2.5445	2.6256	-0.0811	0.0056	0.0236	-76.50	30.00	id.	Id. OT
Unknown	2.8238	-----	-----	0.0098	-----	-----	-----	Samp.	
Unknown	-----	2.8238	-----	-----	0.0075	0.00	30.00	Ref.	
Unknown	3.4572	-----	-----	0.0050	-----	-----	-----	Samp.	
Unknown	-----	14.5257	-----	-----	0.0753	0.00	30.00	Ref.	
Unknown	14.5258	-----	-----	0.0750	-----	-----	-----	Samp.	
Unknown	14.6123	-----	-----	0.0703	-----	-----	-----	Samp.	
Unknown	-----	14.6123	-----	-----	0.0726	0.00	30.00	Ref.	
Unknown	15.6065	15.6065	0.0000	0.1492	0.1492	-0.05	15.00	id., Tall peak	
Unknown	15.9137	15.9138	-0.0001	0.1135	0.1148	-1.09	15.00	id.	
Unknown	17.6694	17.6704	-0.0010	0.0354	0.0348	1.56	30.00	id.	
Unknown	24.3699	24.3716	-0.0017	0.0641	0.0643	-0.28	30.00	id.	
Unknown	25.1839	25.1861	-0.0022	0.1405	0.1403	0.12	15.00	id., Tall peak	
Unknown	26.2557	26.2581	-0.0024	0.0407	0.0406	0.11	30.00	id.	
Unknown	27.3523	27.3548	-0.0025	0.0159	0.0159	0.09	30.00	id.	
Unknown	31.2461	31.2486	-0.0025	0.0251	0.0249	0.62	30.00	id.	
Unknown	35.1585	35.1611	-0.0026	0.0247	0.0246	0.49	30.00	id.	
Unknown	41.6398	41.6434	-0.0036	0.0138	0.0140	-1.15	30.00	id.	
Unknown	42.9932	42.9958	-0.0026	0.0149	0.0151	-0.96	30.00	id.	
Unknown	43.1248	43.1284	-0.0036	0.0367	0.0365	0.54	30.00	id.	
Unknown	44.2929	44.2965	-0.0034	0.0238	0.0239	-0.33	30.00	id.	
Unknown	44.6777	44.6812	-0.0035	0.0533	0.0533	0.00	30.00	id.	
Unknown	44.9799	44.9836	-0.0037	0.3091	0.3088	0.09	15.00	id., Tall peak	

Results Shifts Areas

Identical Identical out of tolerance Reference only Sample only

Applications include:

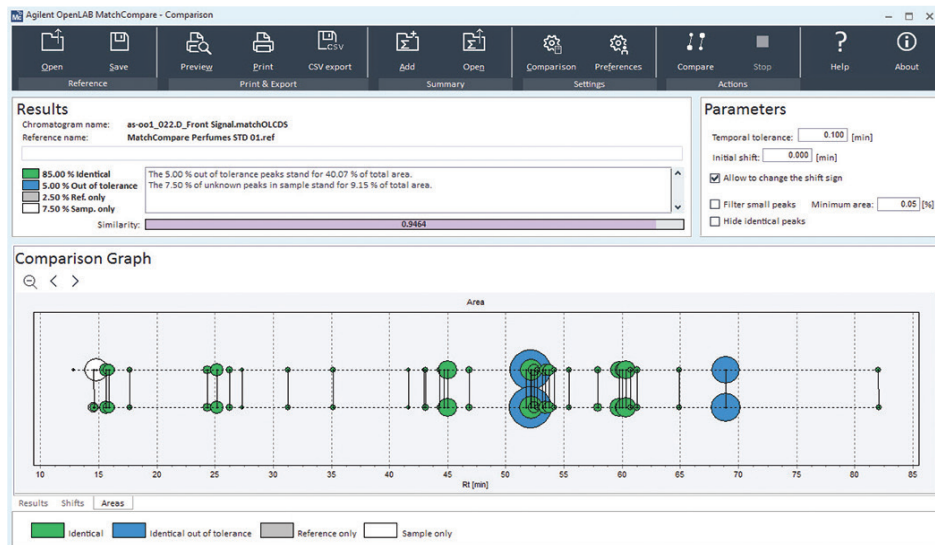
- Flavors and fragrances
- Screening of incoming raw materials
- Dyes and volatile colorants
- Adulteration or contamination monitoring
- Peptide mapping
- Detailed hydrocarbon comparisons

You can easily compare the chromatogram of an unknown sample with a reference chromatogram. This offers you a significant advantage by providing quantitation of individual compounds using OpenLab CDS, and a description of the true nature of the sample with OpenLab CDS MatchCompare.

The Agilent OpenLab MatchCompare comparison screen clearly shows differences between reference and sample chromatograms.

Increase your productivity

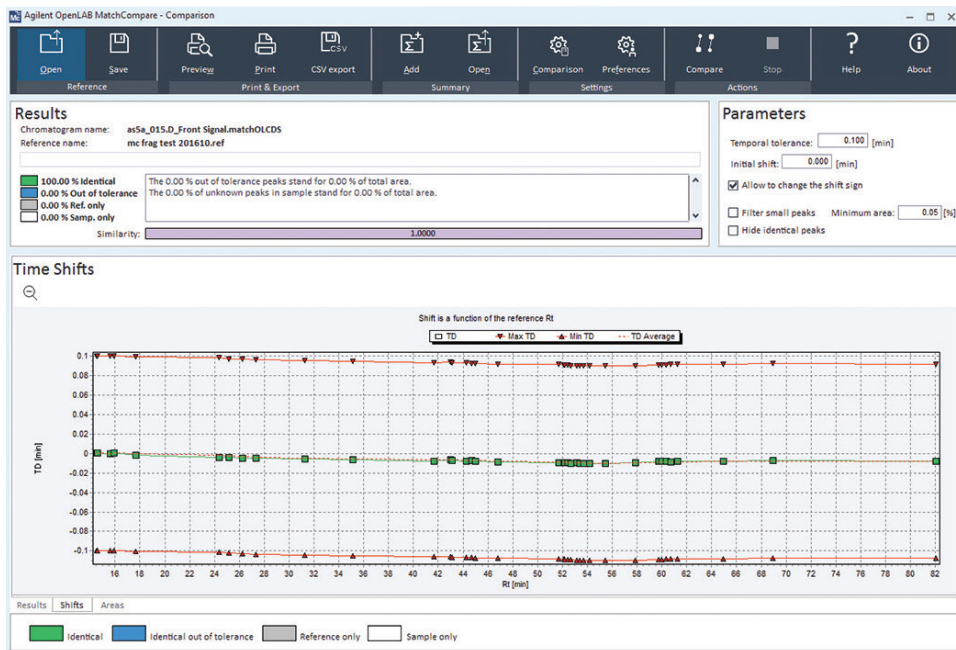
A powerful, intelligent algorithm handles peak distortions, scaling, retention time shifts, and changes in experimental conditions. Using a single reference chromatogram, samples are quickly and easily compared for quality assurance, reducing the need for frequent reference sample reinjections.



Agilent OpenLab MatchCompare graphical comparison permits quick screening of the overall chromatogram match, and allows you to quickly picture differences.

Automatically match peaks

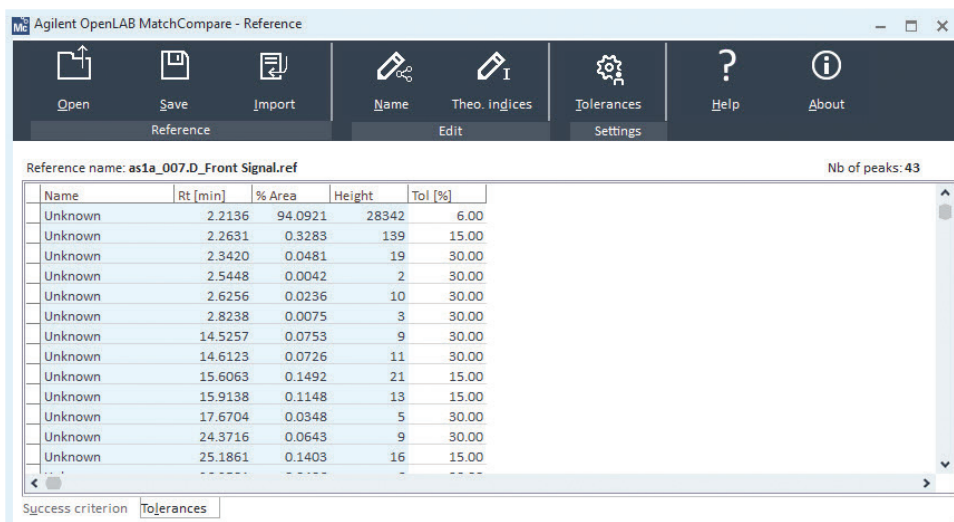
Graphically referenced matched peaks allow retention time shifts of up to several minutes without changing search fidelity. Missing peaks or impurities are represented by different colors—both onscreen and in the report—eliminating errors and speeding data review.



The Agilent OpenLab MatchCompare shift analysis screen lets you easily evaluate chromatographic shifts.

Quickly monitor product quality

OpenLab CDS MatchCompare identifies user-defined area percent tolerance limits for each peak of the reference chromatogram. Area percent comparisons are reported for each matched peak. These comparisons are checked against user-defined limits, and a color-coded report is created for easy identification of pass/fail peaks.



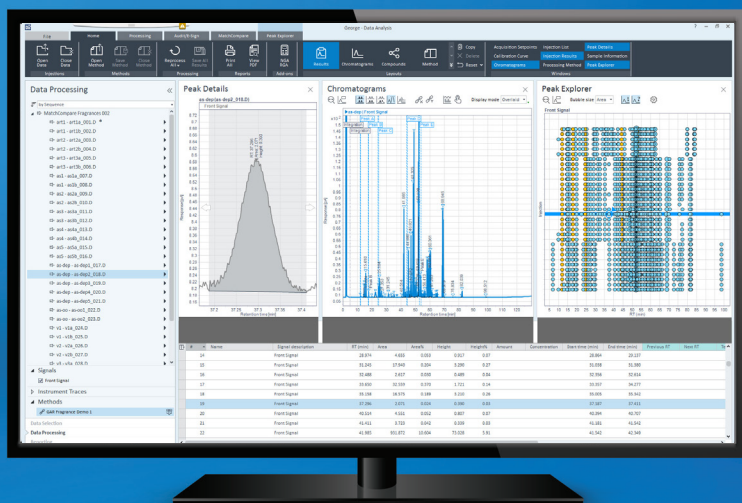
Agilent OpenLAB MatchCompare - Reference

Reference name: as1a_007.D_Front Signal.ref Nb of peaks: 43

Name	Rt [min]	% Area	Height	Tol [%]
Unknown	2.2136	94.0921	28342	6.00
Unknown	2.2631	0.3283	139	15.00
Unknown	2.3420	0.0481	19	30.00
Unknown	2.5448	0.0042	2	30.00
Unknown	2.6256	0.0236	10	30.00
Unknown	2.8238	0.0075	3	30.00
Unknown	14.5257	0.0753	9	30.00
Unknown	14.6123	0.0726	11	30.00
Unknown	15.6063	0.1492	21	15.00
Unknown	15.9138	0.1148	13	15.00
Unknown	17.6704	0.0348	5	30.00
Unknown	24.3716	0.0643	9	30.00
Unknown	25.1861	0.1403	16	15.00

Success criterion: Tolerances

Reference setup screens in Agilent OpenLab MatchCompare allow you to name peaks and set relative or absolute tolerances for each individual peak.



Compatibility with OpenLab CDS

OpenLab CDS MatchCompare can be installed and used without OpenLab CDS. Data files that are converted to AIA format can be processed with this software. However, when OpenLab CDS MatchCompare is used within OpenLab CDS, no conversion is required, simplifying the comparison process even further.



Compatibility with Agilent Data Systems

OpenLab CDS MatchCompare provides both A.01.03.1 **plus** A.01.02 on the same disk, ensuring compatibility with the widest range of OpenLab CDS editions and versions.

Platform	OpenLab CDS 2.0 and greater	OpenLab CDS ChemStation Edition	OpenLab CDS EZChrom Edition	ChemStation rev. B	EZChrom Elite	MS Software, GC/MSD ChemStation, MassHunter
OpenLab CDS MatchCompare A.01.02	Not Supported	C.01.03 to C.01.05 Supported	A.04.04 and A.04.05 Supported	B.04.03 Supported	Not Supported	Not Supported
OpenLab CDS MatchCompare A.01.03.1	2.0 to 2.3 Supported	C.01.06 to C.01.08 Supported	A.04.06 to A.04.08 Supported	Not Supported	Not Supported	Not Supported

Ordering information

Part number	Product description	Ordering notes
M8350AA	OpenLab CDS MatchCompare	See compatibility matrix for supported OpenLab CDS versions
M8351AA	OpenLab CDS MatchCompare Upgrade	If you have previously bought Galaxie MatchCompare or OpenLab CDS MatchCompare

Learn more about OpenLab CDS MatchCompare:

www.agilent.com/chem/matchcompare

Learn more about OpenLab CDS:

www.agilent.com/chem/openlabcds

Learn more about OpenLab software suite:

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