



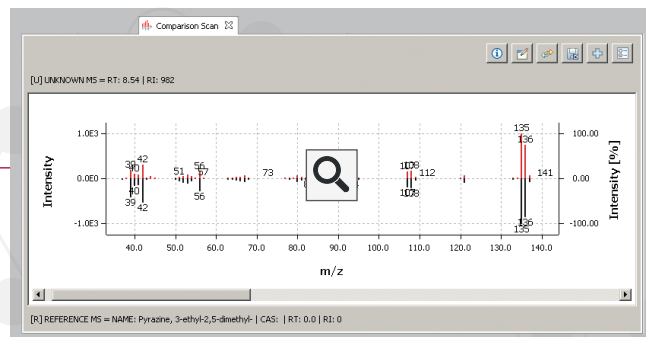
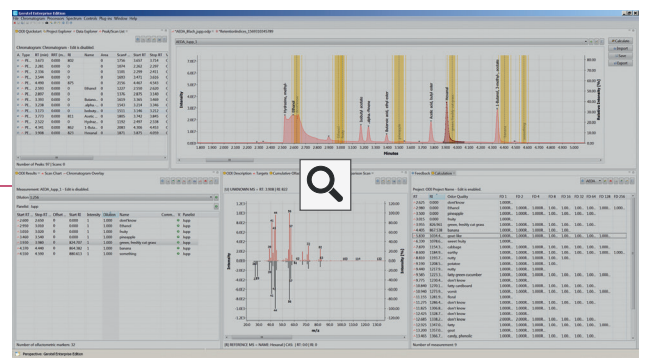
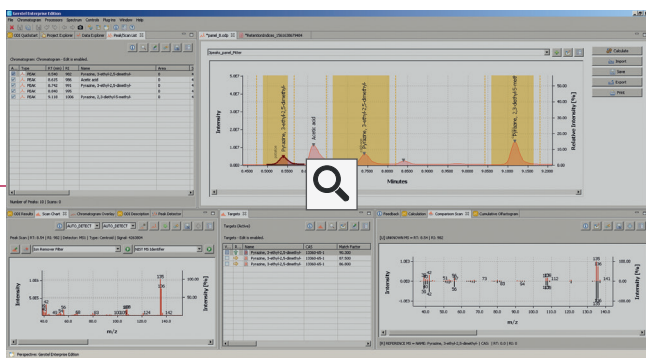
# Olfactory Data Interpreter (ODI)

## Efficient GC-O/MS data interpretation

The Olfactory Data Interpreter (ODI) Software processes chromatography data, for example from GC/MS, GC/FID or GC/PFPD, in combination with sensory impressions and intensities obtained using the ODP 4.

The software automatically recognizes and imports GC- and GC-MS data formats from different instrument brands. The ODI displays an overlay of the chromatogram, olfactogram and sensory impressions for easy evaluation and analysis.

In addition, the analyst is presented with a detailed overview of required parameters for processing GC-O data including: Retention times, retention indices (RI), GC-O intensities as well as olfactory descriptors. Based on an n-alkane standard mixture chromatogram, every peak is automatically assigned its retention index.



RT	RI	Odor Quality	FD 1	FD 2	FD 4	FD 8	FD 16	FD 32	FD 64	FD 128	FD 256
2.625	0.000	don't know	1.000R								
2.980	0.000	Ethanol	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
3.500	0.000	pineapple	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
3.025	0.000	fruity	1.000R								
3.955	826.961	green, freshly cut grass	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
4.465	867.538	banana	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
5.830	1034.4	ocean-like	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
6.330	1078.6	sweet fruity	1.000R								
7.870	1154.3	cabbage	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
8.600	1184.9	earthy	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
8.830	1193.7	nutty	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
9.190	1208.5	potatoe	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
9.440	1217.9	nutty	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
9.565	1223.3	fatty green cucumber	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
9.775	1230.4	don't know	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
10.840	1270.1	fatty cardboard	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
10.940	1273.9	violet	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
11.155	1281.9	floral	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
11.275	1286.4	don't know	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
11.825	1306.8	don't know	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
12.425	1328.7	don't know	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
12.685	1338.2	don't know	2.000R	2.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
12.925	1347.0	fatty	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
13.200	1357.0	goat	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00
13.465	1366.7	candy, phenolic	1.000R	1.000R	1.000R	1.00	1.00	1.00	1.00	1.00	1.00

### 1 Identification based on GC-O/MS data

The ODI integrates multiple functions for extraction and interpretation of mass spectra. The MS library search function handles library data formats from a variety of producers. The GERSTEL Applications Laboratory recommends the NIST-AMDIS Software, integrated with the ODI-Software for fast and accurate compound identification as well as spectral deconvolution of co-eluting compounds.

### 2 Aroma-Extrakt-Verdünnungsanalyse (AEDA)

The ODI enables simplified processing of Aroma Extract Dilution Analysis (AEDA) data. The maximum dilution factor, referred to as the Final Dilution factor (FD) at which a substance is still perceptible at the ODP, is stored together with the sensory impression, Retention Index and identification result. The AEDA report can be exported by copy and paste or imported into MS® Excel for further processing.