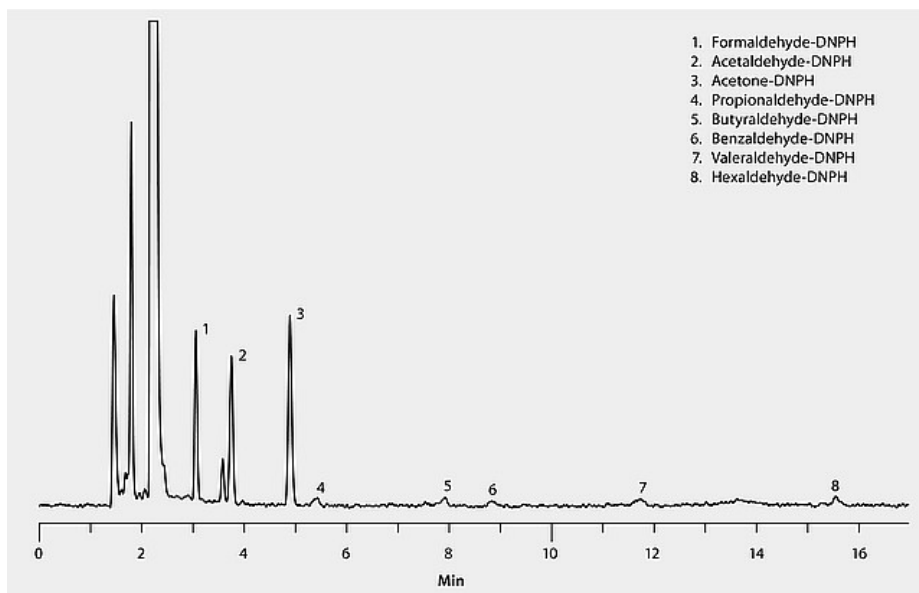


# HPLC Analysis of DNPH Carbonyl Compounds on Ascentis® Express C18



## Conditions

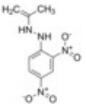
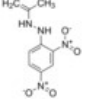
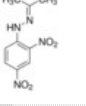









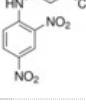

sample/matrix	Wood Composite/Air
SPE tube/cartridge	Pk 50 LpDNPH S10 350 mg/3 mL, BULK (23124-U)
elution	1.0 mL Acetonitrile
column	Ascentis Express C18, 15 cm x 4.6 mm, 2.7 µm particles (53829-U)
column temp.	24 °C
gradient	65% A held for 1 min; to 67% A in 0.5 min; held for 6.5 min; to 70% A in 3 min; held for 6 min
flow rate	0.8 mL/min
injection	10 µL
detector	UV, 360 nm

## Description

Application	HPLC Analysis of DNPH Carbonyl Compounds on Ascentis® Express C18
Categories	Analytical Chromatography, Air Monitoring Applications, Aldehydes, Aldehydes & Ketones
Featured Industry	Environmental Industrial Hygiene
Legal Information	Ascentis is a registered trademark of Sigma-Aldrich Co. LLC
suitability	application for air monitoring, application for HPLC

## Materials

Product #	Image	Description
442434		Acetaldehyde-2,4-DNPH analytical standard
CRM47340		Acetaldehyde-2,4-DNPH solution certified reference material, 1000 µg/mL in acetonitrile, ampule of 1 mL
5.33001		Acetic acid 100% for LC-MS LiChropur™

Product #	Image	Description
CRM4M7341		Acetone-2,4-DNPH solution certified reference material, 1000 µg/mL in acetonitrile, ampule of 5 x 1 mL
CRM47341		Acetone-2,4-DNPH solution certified reference material, 1000 µg/mL in acetonitrile, ampule of 1 mL
442436		Acetone-2,4-DNPH analytical standard
1.00029	CH <sub>3</sub> CN	Acetonitrile hypergrade for LC-MS LiChrosolv®
73594		Ammonium acetate for mass spectrometry, LiChropur™, eluent additive for LC-MS
70221		Ammonium formate eluent additive for LC-MS, LiChropur™, ≥99.0%
53829-U		Ascentis® Express C18, 2.7 µm HPLC Column 2.7 µm particle size, L x I.D. 15 cm x 4.6 mm
CRM47343		Benzaldehyde-DNPH solution certified reference material, 100 µg/mL in acetonitrile (as the aldehyde), ampule of 1 mL
442504		Butyraldehyde-2,4-DNPH analytical standard
CRM47345		Butyraldehyde-DNPH solution certified reference material, 1000 µg/mL in acetonitrile (as the aldehyde), ampule of 1 mL
442597		Formaldehyde-2,4-DNPH analytical standard
CRM47177		Formaldehyde-DNPH solution certified reference material, TraceCERT®, 100 µg/mL in acetonitrile (as aldehyde), ampule of 1 mL
CRM4M7177		Formaldehyde-2,4-DNPH Solution certified reference material, TraceCERT®, 100 µg/mL in acetonitrile (as aldehyde), ampule of 5 x 1 mL
5.33002		Formic acid 98% - 100% for LC-MS LiChropur™
1.06035	CH <sub>3</sub> OH	Methanol hypergrade for LC-MS LiChrosolv®
5.43841	KH <sub>2</sub> PO <sub>4</sub>	Potassium dihydrogen phosphate anhydrous for HPLC LiChropur™
442768		Propionaldehyde-2,4-DNPH analytical standard
CRM47181		Propionaldehyde-DNPH solution 1000 µg/mL in acetonitrile (as the aldehyde), ampule of 1 mL
69372		Triethylammonium acetate buffer for HPLC, 0.98-1.02 M
442834		Valeraldehyde-2,4-DNPH analytical standard
CRM47185		Valeraldehyde-DNPH solution certified reference material, 100 µg/mL in acetonitrile (as the aldehyde), ampule of 1 mL
1.15333	H <sub>2</sub> O	Water for chromatography (LC-MS Grade) LiChrosolv®