

# Trifluoroacetic Acid, Optima<sup>®</sup> LC/MS Grade



Fisher Chemical Optima LC/MS Grade Trifluoroacetic Acid is an ultrapure reagent used as an additive for the formulation of solvent blends for the mobile phase in LC/MS applications.

Trifluoroacetic Acid is often added to the mobile phase to enhance chromatographic separations. When reversed-phase chromatography is applied to protein and peptide analysis, TFA is frequently used as an ion-pairing reagent in mobile phases. Although TFA is known to suppress MS ionization, use of a low concentration of TFA can enhance retention and improve peak shape of a product during the analytical separations.

For preparing mobile phase blends, A116-50 Trifluoroacetic Acid can be used with Optima LC/MS Solvents such as A955 Acetonitrile, W6 Water, and A456 Methanol.

Catalog No.	Volume
<b>A116-50</b>	50mL

## KEY FEATURES

- Minimal metal impurities
- Low mass spectrometry background noise
- Lowest impurity background using diode array detection (LC-UV)
- Lot to lot consistency
- Extended column life due to low impurity levels using Optima LC/MS mobile phase prepared with A116 Trifluoroacetic Acid.

## RECOMMENDED STORAGE

- Store at +4°C

## APPLICATIONS

- Proteomics
- Pharmaceutical research
- Drug discovery
- Biomedical research
- Forensics research

PRODUCT SPECIFICATIONS	
Product Part Numbers and Package Configurations	A116-50, 50mL
Description	Clear, colorless, fuming liquid
Identification	Pass Test
Color (APHA), max	10
Assay	99.5% min
<b>Optical Absorbance (as is)</b> , wavelength, max	
300 nm	0.03 Au
275 nm	0.06 Au
<b>Optical Absorbance</b> (0.1% aqueous), wavelength, max	
254 nm	0.003 Au
230 nm	0.06 Au
220 nm	0.18 Au
210 nm	0.55 Au
<b>LCMS Suitability</b> (at 0.1% aqueous)	Pass Test
<b>Residue after evaporation</b> (at 0.1% aqueous)	1 ppm max
Water (KF), max	0.05%
<b>Trace Ionic Impurities</b> (at 0.1% aqueous) (ppb max)	
Aluminum (Al)	20 ppb
Calcium (Ca)	50 ppb
Copper (Cu)	10 ppb
Iron (Fe)	10 ppb
Lead (Pb)	10 ppb
Magnesium (Mg)	10 ppb
Manganese (Mn)	10 ppb
Nickel (Ni)	10 ppb
Potassium (K)	20 ppb
Silver (Ag)	10 ppb
Sodium (Na)	50 ppb
Zinc (Zn)	20 ppb

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