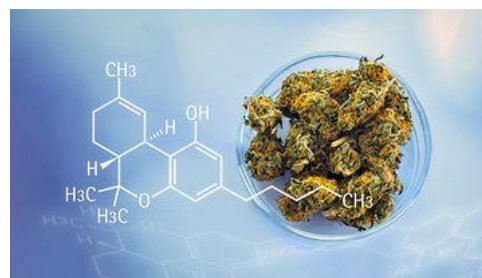


## Industrial Hemp and Cannabinoid Testing at AST

Analytical Services Tasmania (AST) has recently gained NATA accreditation for testing cannabinoids in industrial hemp crops and hemp-based food products.



We use state-of-the-art instrumentation to separate and accurately quantify a total of 12 major and minor cannabinoids (see table below). We are able to easily meet the testing requirements for plants (<1% Total THC) and the Food Standards Code for both THC and CBD. Note that we are not able to test products related to the medical use of cannabis.



### A complete cannabinoid profile from a single analysis

Our method employs Liquid Chromatography (LC) to separate structurally similar cannabinoids in both acidic and neutral forms, followed by Tandem-Mass Spectrometry (MS/MS) to provide unequivocal identification at very low detection levels. Because analysis by LC does not require heating, testing by this method provides a more accurate determination of the actual amounts of  $\Delta$ 9-THC and THCA present in the sample in a single analysis, compared with GC-FID methodology<sup>1</sup>.

Compound	Abbreviation	Limit of Reporting	
		Plant (%w/w)	Food Products (mg/kg)
Cannabidiol	CBD	0.01	0.05
Cannabidiolic acid	CBDA	0.01	0.05
Total CBD ^	Total CBD	0.01	0.05
Cannabichromene	CBC	0.01	0.05
Cannabidivarin	CBDV	0.01	0.05
Cannabidivarinic acid	CBDVA	0.01	0.05
Cannabigerol	CBG	0.01	0.05
Cannabigerolic acid	CBGA	0.01	0.05
Cannabinol	CBN	0.01	0.05
Tetrahydrocannabivarin	THCV	0.01	0.05
$\Delta$ 8-tetrahydrocannabinol	$\Delta$ 8-THC	0.01	0.05
$\Delta$ 9-tetrahydrocannabinol	$\Delta$ 9-THC	0.01	0.05
$\Delta$ 9-tetrahydrocannabinolic acid A	THCA	0.01	0.05
Total THC #	Total THC	0.01	0.05

^ calculated from CBD and CBDA

# calculated from  $\Delta$ 9-THC and THCA

1. [Nei et al, The Role of Mass Spectrometry in the Cannabis Industry,](#)

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Please contact us if you would like more information regarding hemp testing:

- terpenes
- pesticides
- metals
- microbiological

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