Electronic Cigarette Standards

The popularity of vaping and electronic cigarettes has brought up many questions about possible health concerns.

The "juice" used in these devices along with the heating element or atomizer, can introduce many different organic and inorganic chemicals into the body. One pod of the introduced oil can contain approximately the same amount of nicotine found in 20 cigarettes. The aerosol released to both the user and the second-hand vapor can contain aldehydes, PAHs, organic acids, nicotine degradation products and trace heavy metals, all of which may be a concern to human health and the environment.

Currently, there are no regulations regarding the use of these chemicals in vaping products, but AccuStandard is aware of the concern.

We are now offering the following analytical standards for research analysis.

British America Tobacco Analysis

BAT-EC-01 — **1 mL**, 5 comps.

	%w/w
Nicotine	1
Water	18
Glycerol	49
Propylene glycol	31.98
4-(4-Hydroxyphenyl)-2-butanone	0.02

Varied Solvent Ratio Standards for Nicotine Analysis

Nicotine Standard 1
EC-NIC-01S — **1 mL**
10 mg/mL in Propylene glycol:Glycerol (80:20)

Nicotine

Nicotine Standard 2
EC-NIC-02S — **1 mL**
10 mg/mL in Propylene glycol:Glycerol (50:50)

Nicotine

Nicotine Standard 3
EC-NIC-03S — **1 mL**
10 mg/mL in Propylene glycol:Glycerol (20:80)

Nicotine

N'-Nitrosonornicotine Standard
EC-NIC-04S — **1 mL**
10 µg/g in Propylene glycol:Glycerol (50:50)

N'-Nitrosonornicotine

Nicotine Degradation Standard
EC-NIC-05S — **1 mL**
500 µg/g each in Propylene glycol:Glycerol (50:50) 2 comps.

(R,S)-Anabasine
Cotinine

Organic Functional Group Analysis

Aldehyde Standard
EC-ALD-01S — **1 mL**
50 µg/mL each in Propylene glycol 2 comps.

Acetaldehyde
Formaldehyde

PAH Standard
EC-PAH-01S — **1 mL**
10 µg/g each in Propylene glycol:Glycerol (50:50) 2 comps.

4-Aminobiphenyl
Benz[a]pyrene

Organic Acids Standard
EC-ACD-01S — **1 mL**
1000 µg/g in Propylene glycol:Glycerol (50:50) 2 comps.

Acetic acid
L-(+)-Lactic acid

Heavy Metals Analysis

Trace Metals Standard
EC-MET-01S-1 — **100 mL**
10 µg/mL each in 2% Nitric Acid 4 comps.

Cadmium
Chromium
Copper
Nickel

Trace Metals Standard
EC-MET-02S-1 — **100 mL**
10 µg/mL each in 2% Nitric Acid 5 comps.

Aluminum
Arsenic
Iron
Lead
Manganese