



Embark on a Journey of Discovery  
with Orochem's Cutting-Edge Solutions

## Applications in Food / Dietary Supplements

With Orochem, Every Experiment Counts Towards Tomorrow's Breakthroughs



For Free Consultation, Please Enquire:

Dr. Anil Oroskar, PhD  
Dr. Asha Oroskar, PhD

#### USA HQ

Tel: 630 210 8300  
info@orochem.com  
www.orochem.com

340 Shuman Blvd  
Naperville, IL 60563  
USA

#### INDIA

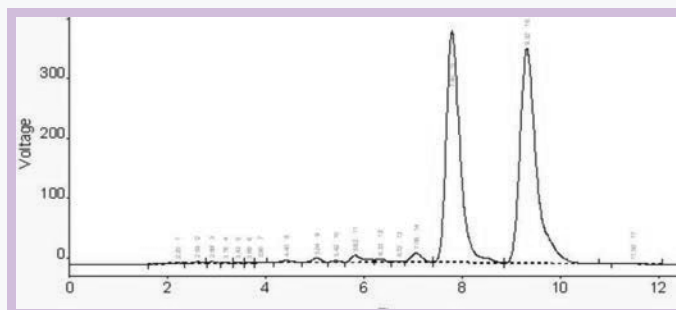
Tel: +91-22-27603569  
orochemindia@orochem.com  
www.orochem.com

Plot # R 588/1, TTC Indl.  
Area Rabale Navi Mumbai  
400 705 India

ISO 9001:2015

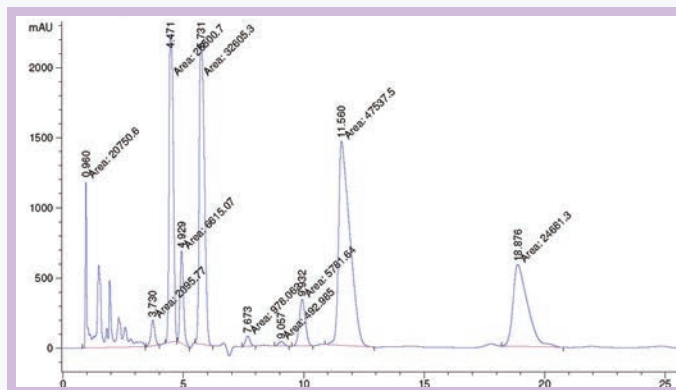
### Vitamins

Carotene Isomers



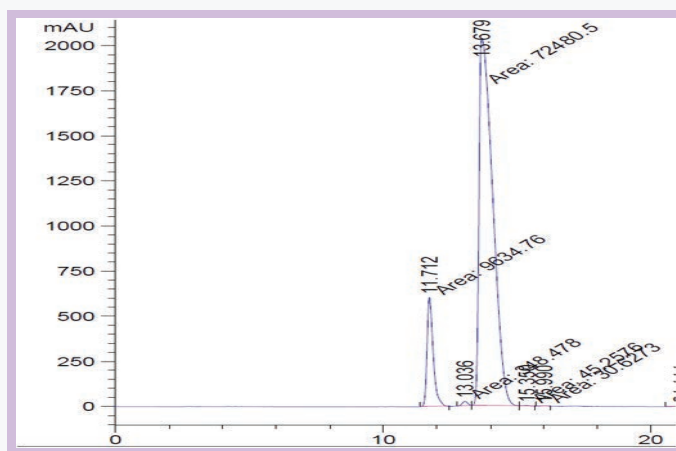
Reliasil C30

### α-Tocopherol and Tocotrienol Isomers



Reliasil Silica

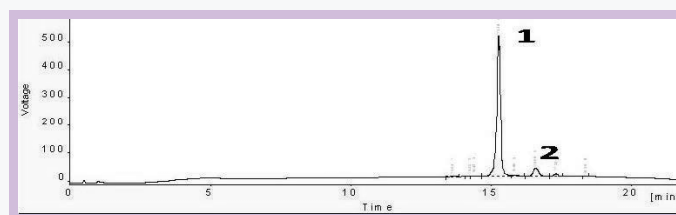
### Vitamin K Isomers



Reliasil Silica

### Vitamins

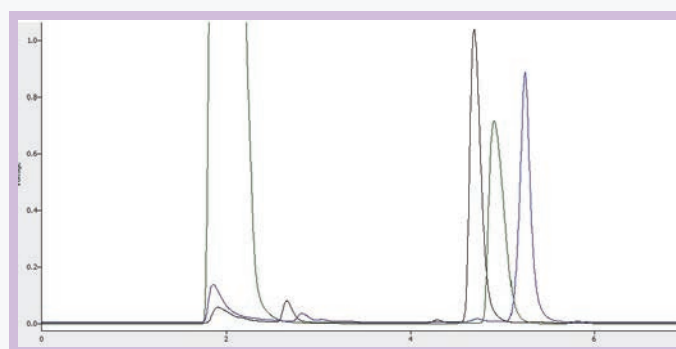
α-Tocotrienol and γ-Tocopherol



Orosil Phenyl-hexyl

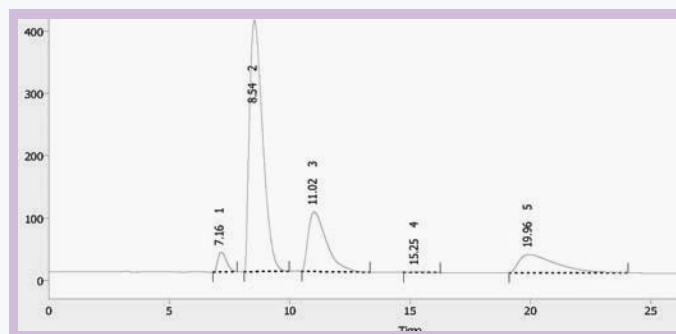
### Fatty Esters

EPA/ALA/DHA Ethyl Esters



Reliasil C18

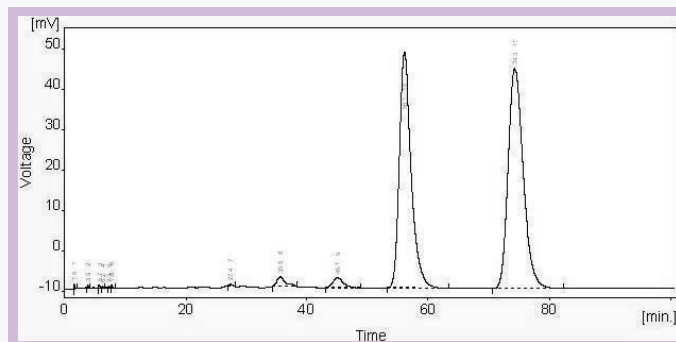
### Linoleate, Oleate, Palmitate and Stearate



Reliasil C30

### Carotene

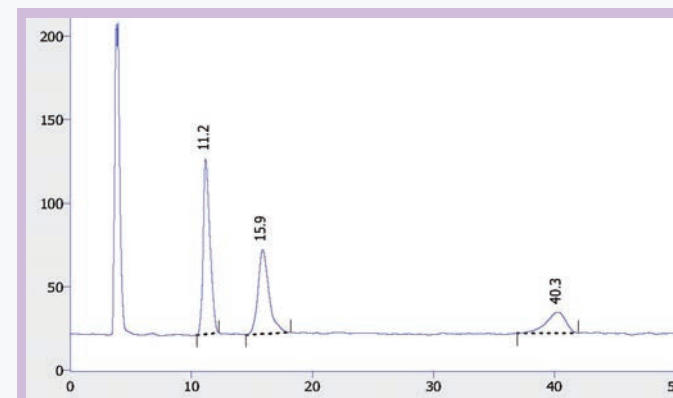
α- and β-Carotene Separation



Orosil C30

### Carbohydrates

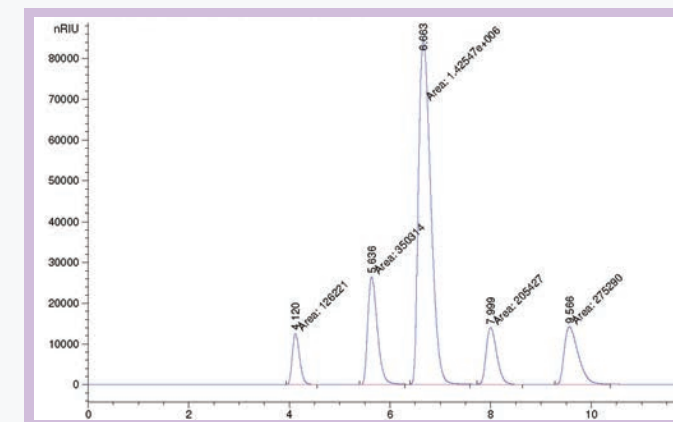
Lactose, Glucose, Galactose, Tagatose



Reliasil Amino

### Alcohol

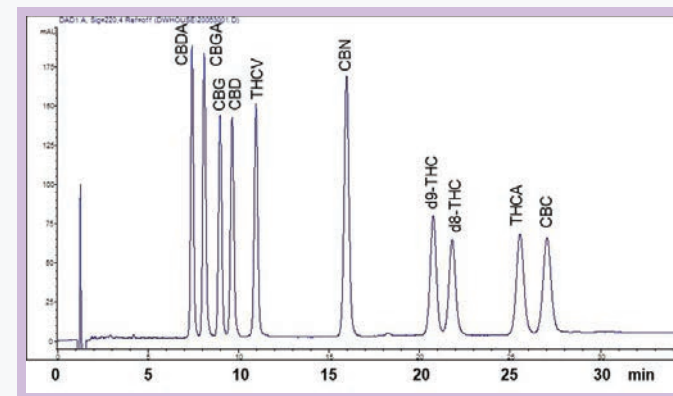
Methanol, Ethanol, 2-propanol



Matrix Polychrome

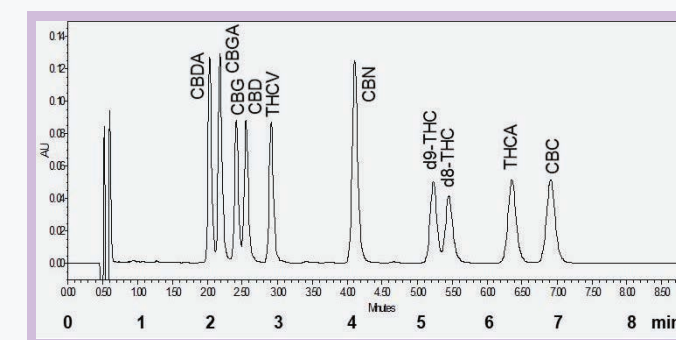
### Cannabinoids

Isocratic Separation

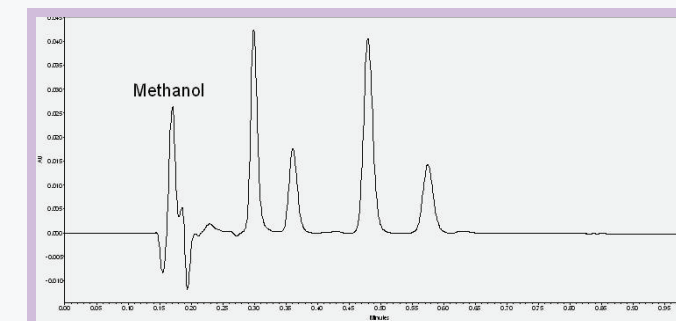


Orosil C18-HC

### Cannabinoids

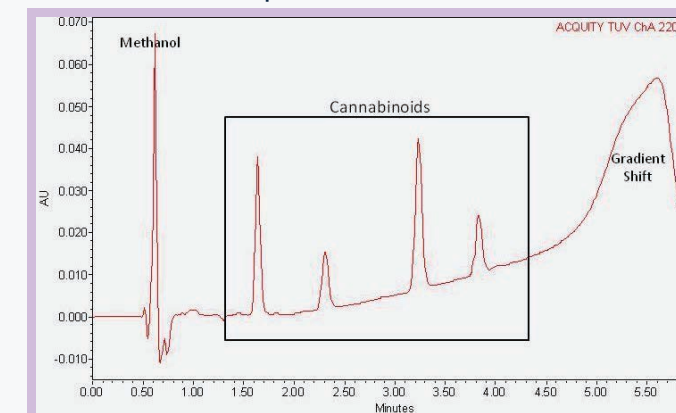


Gazelle C18

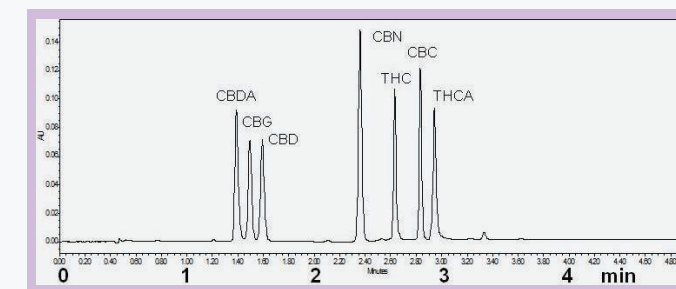


Gazelle C18

### Cannabinoid Separation

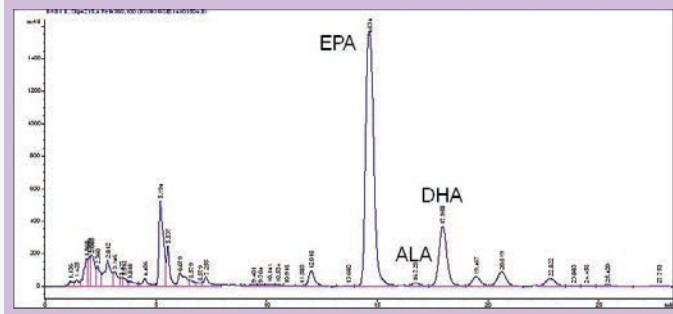


Gazelle C18



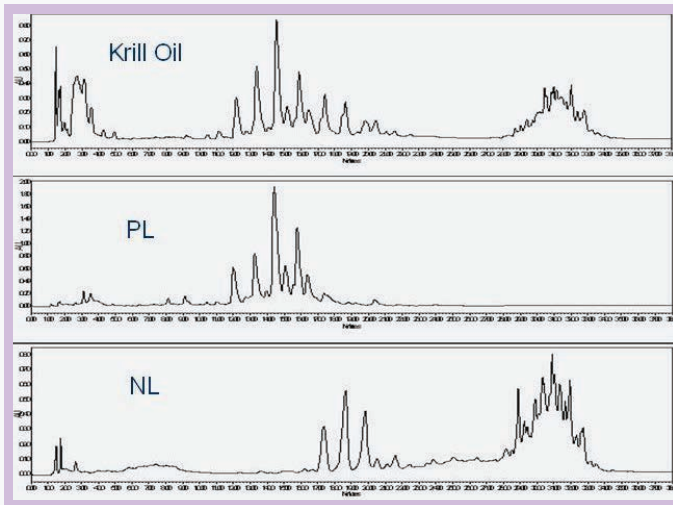
Gazelle C18

**Omega-3**  
Analysis of Fatty Esters



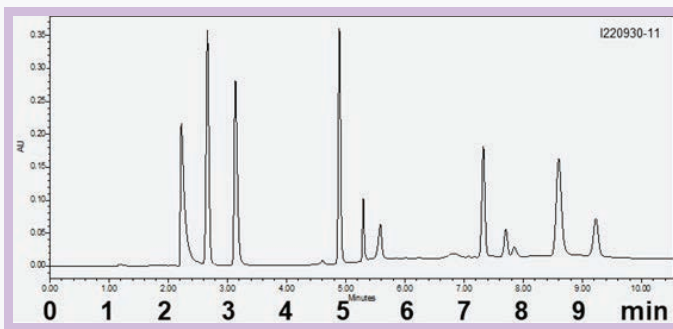
Orosil ODS

**Krill Oil**  
Analysis of Krill Oil



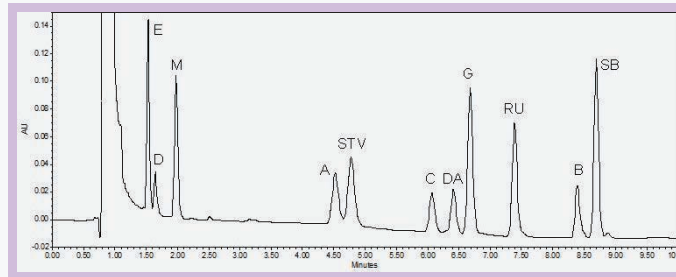
Orosil C18

**Vitamin B**  
Separation of 9 B Vitamins



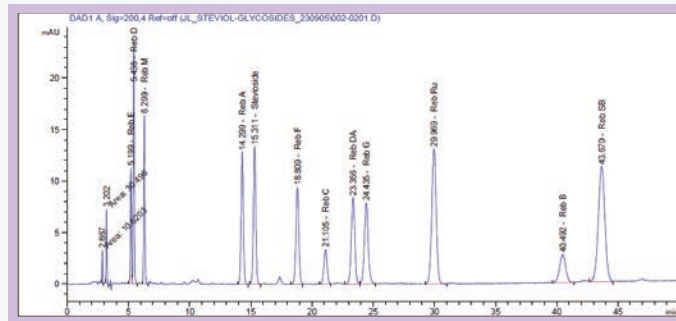
Gazelle Polar C18

**Sweetener**  
Analysis of Steviol Glycosides



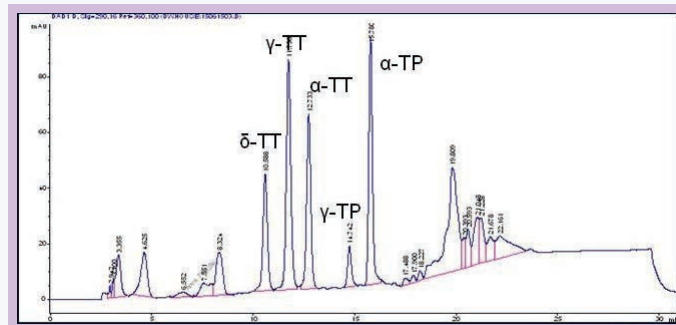
Orosil C18

Separation of Steviol Glycosides



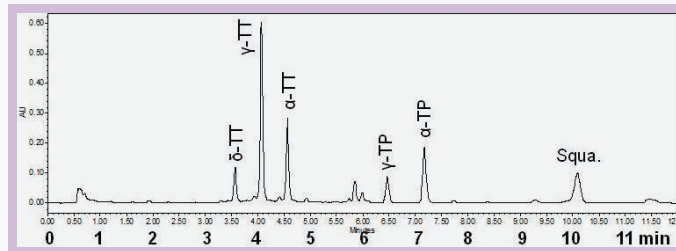
Orosil C18

**Vitamin E**  
Analysis of Tocotrienols and Tocopherols



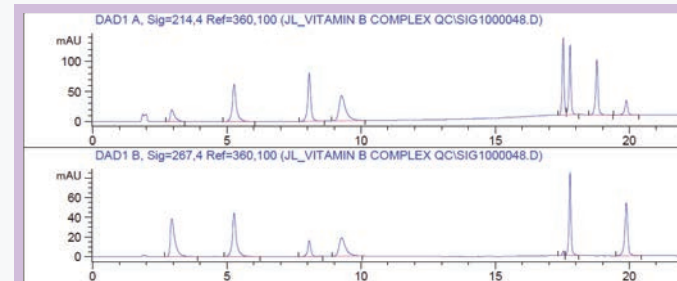
Orosil C18

Analysis of Tocotrienols and Tocopherols



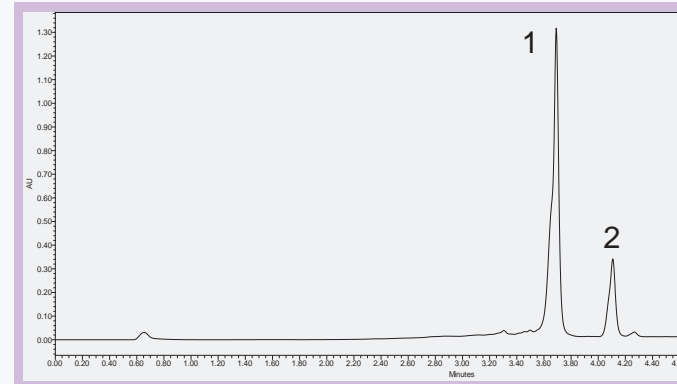
Orosil C18

**Vitamin B**  
Separation of Vitamin B Complex



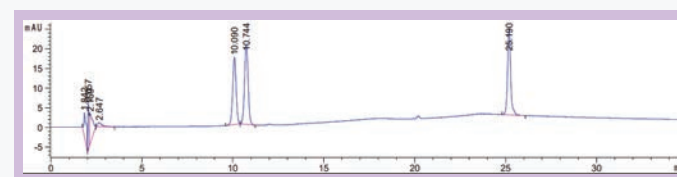
Orosil Gold C18-HC

**Vitamin D**  
Separation of Metabolites



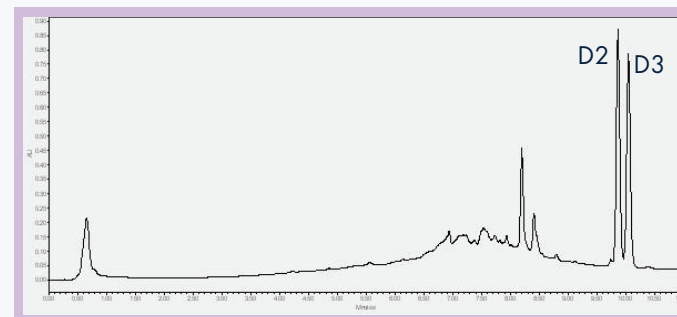
Gazelle C18

Separation of D2, D3, and K2



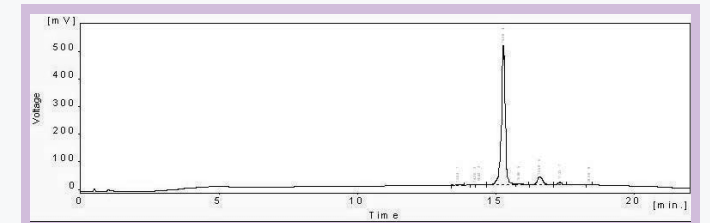
Orosil Gold C18-HC

Separation of D2 and D3



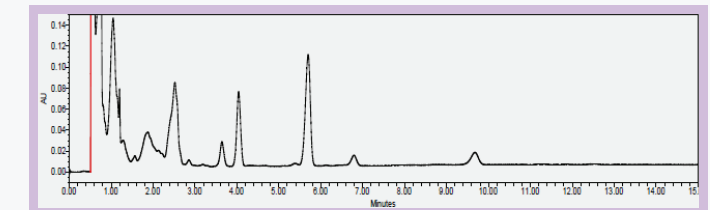
Gazelle C18

**Vitamin E**  
Analysis of Purified Vitamin E



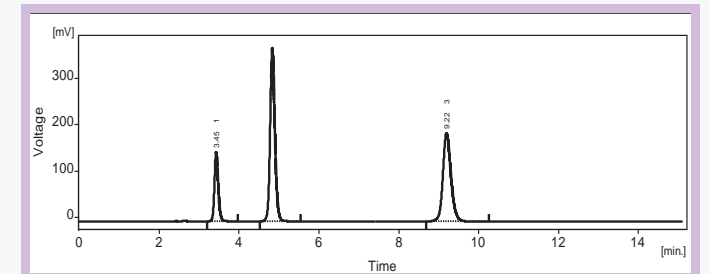
Reliasil Phenyl-Hexyl

**Orange Juice**  
Analysis of Heptane Extract



Orosil Silica

**Xanthines**  
Separation of Xanthines



Reliasil ODS

COLUMN	APPLICATION AREAS	ANALYTES
Matrix C18, Monitor C18	Pharmaceuticals	Acetaminophen, Caffeine, 2-Acetamidophenol, Acetanilide, Acetylsalicylic Acid, Azithromycin
Orosil C18	Pharmaceuticals	Tamoxifen, Pregabalin, Budesonide, Eszopiclone, Eprosartan, Stavudine, Ciprofloxacin, Atracurium, Acetaminophen, Caffeine, 2-Acetamidophenol, Acetanilide, Acetylsalicylic Acid
	Vitamins	Riboflavin, Resorcinol, $\delta$ -, $\alpha$ -, $\gamma$ -, Tocotrienols & Tocopherols
	Nutraceutical	Krill Oil, PL, NL
	Sweetener	Rebaudioside, Stevioside, Dulcoside, Steviolbioside
	Pharmaceutical, Food, Nutraceutical	Rebaudioside, Stevioside, Dulcoside, Steviolbioside
Prestige C18	Pharmaceuticals	Ampicilline, Chloramphenicol
	Toxins	mycotoxin
	Pesticides	Methomyl, Oxamyl, Aldicarb, Monuron, Carbaryl, Diuron, Propazine, Carbendazim, Imidacloprid, Acephate, Malathion, Dimethoate
	Test Mixtures	Ethyl Benzoate, Toluene, Ethylbenzene, uracil, aniline, p-toluidine, 4-ethyl aniline, N,N-diethylaniline, pyridine, phenol
Reliachrom	Pharmaceuticals, Nucleic Acids	Uracil, 5-fluorouracil, 2-Deoxyuridine, 5-fluoro-2'-deoxyuridine
Orosil Polar C18	Amino Acids	L-Valine, L-Phenylalanine
Reliasil Phenyl		9-Tetrahydrocannabinol
Reliasil C18, C8	Pharmaceuticals and Metabolites	Caffeine, Theobromine, Theophylline, Aspirin, Carbamazepine, Acetaminophen, Amitriptyline, Procainamide
Reliasil Amino	Alcohols, polysaccharides, sugars	Isoamyl Alcohol, IPA, Glycerol, Butanol, Ethanol, Tagatose, Arabinose, Galactose, Sucrose, Rhamnose, Xylose, Mannose
Reliasil C30 MatrixPolychrome	Biofuel, Pharmaceuticals, steroids, fatty acids	Methanol, Ethanol, 2,3-Butanediol, 2-Propanol, Carboplatin, Decitabine, Testosterone & Epitestosterone, beta-&dexamethasone, Oleic acid, Palmitic acid, linoleic acid, Carotene
Orosil Phenyl-Hexyl	Vitamins	Vitamin E
Orosil C18-HC Gazelle C18	Cannabinoids	Cannabidiolic Acid, Cannabigerolic Acid, Cannabigerol, Cannabidiol, Tetrahydrocannabivarin, Cannabinol, d9-Tetrahydrocannabinol, d8-Tetrahydrocannabinol, Tetrahydrocannabinolic Acid, Cannabichromene

COLUMN	APPLICATION AREAS	ANALYTES
Reliasil C18, C8	Nucleic Acids	Uracil, 5-Fluorouracil
	Food Additives/Safety	Benzoic Acid, Melamine
	Organic Acids	Fumaric Acid, Formic Acid, Acetic Acid, Butyric Acid
	Steroids	Estriol, Estradiol, Cortisone, Testosterone, Progesterone, Hydrocortisone
	Vitamins	L-Ascorbic Acid, Nicotinic Acid, Pyridoxine, Nicotinamide, Vitamin D2, Vitamin D3, 25-OH Vitamin D2, 25-OH Vitamin D3, 1,25-Dihydroxy VD3
	Drugs of Abuse, Pharmaceuticals	Phenobarbital, Secobarbital, Propranolol, MDA, Amphetamine, Methamphetamine, Diazepam, Hydrocodone, Cocaine, Naltrexone, Naloxone, Carvedilol, Carbamazepine
	Pesticides	Acephate, Dimethoate, Malathion, Carbendazim, Imidacloprid, Carbaryl, Diuron, Dimethoate
	Protein and Peptides	Peptide
Orosil C30	Carotene	$\alpha$ -Carotene, $\beta$ -Carotene
Orosil ODS	Omega-3	EPA, ALA, DHA
Orosil Silica	Food	Juice Heptane Extract
Gazelle C18	Vitamins	$\delta$ -, $\alpha$ -, $\gamma$ -, Tocotrienols & Tocopherols
	Blood	1,25-(OH) <sub>2</sub> Vit D, 25-OH Vit D
	Metabolites	Vitamin D2, and D3
Orosol Gold C18-HC	Vitamins	B1 Thiamine, B3 Niacin, B6 Pyridoxine, B3 Nicotinamide, B12 Cyanobalamin, B9 Folic Acid, B7 Biotin, B2 Riboflavin
	Pharmaceutical, Food, Nutraceutical	Vitamin D2, D3, and K2
Reliasil Phenyl-Hexyl	Hydrocarbons	$\alpha$ -Tocotrienol, $\gamma$ -Tocopherol
Gazelle Polar C18	Vitamins	Thiamin (B1), Niacin (B3), Pyridoxine (B6), Niacinamide (B3), Riboflavin (B2), Calcium Pantothenate (B5), Folic Acid (B9), Biotin (B7), Cyanobalamin (B12)