



**A Better Way
To Get More From
LC Analysis**



Applications

SEDERE has generated a large number of application notes that describe the very extensive use of the **SEDEX Low-Temperature Evaporative Light-Scattering Detection** in LC and SFC. Although this is not an exhaustive list, it provides several examples showing how the detector is used to solve a broad range of analytical problems.

For more complete and recent information on ELSD technology and applications, you can also refer to our up-to-date [SEDERE ELSD Bibliography](#).

Key:

Technique: CCC=Counter Current Chromatography, GPC=Gel Permeation Chromatography, HPLC=High Performance Liquid Chromatography, SFC=Supercritical Fluid Chromatography.

Compound	Chemical Class	Technique	Application Number
Acesulfam – K	Sweetener	HPLC	144
Acetylenecarboxilic Acid	Organic Acid	HPLC	91
Aconitic Acid	Organic Acid	HPLC	102
Alanine	Amino Acid	HPLC	114 - 123
Aliphatic Alcohols	Fatty Alcohol	SFC	34
Alkyl	Thioglucoside	HPLC	73
Glucosinolates			
Alkylglycosides	Detergent	HPLC	25
Alkylglycosides	Detergent	SFC	27
Androsterone	Steroid	HPLC	28
Arachidonic Acid	Fatty Acid	HPLC	31
Arginine	Amino Acid	HPLC	90
Asparagine	Amino Acid	HPLC	113
Aspartame	Sweetener	HPLC	144
Aspartic Acid	Amino Acid	HPLC	114
Bisulfan	Sulfonic Ester	HPLC	82
Bromide	Anion	HPLC	145
Caffeine	Alkaloid	SFC	12
Calcium	Cation	HPLC	106
Beta Carotene	Terpenoid	HPLC	100
Cerebroside	Phospholipid	HPLC	5
Cetylbetaine	Detergent	HPLC	145
Cetylpyridinium			
Chloride	Aromatic	HPLC	14
Cetrimide	Antiseptic	HPLC	103
Chloramphenicol	Antibiotic	SFC	12
Chloride	Anion	HPLC	106
Cholesterol	Steroid	HPLC	41
Citric Acid	Organic Acid	HPLC	38
Citrulline	Amino Acid	HPLC	125
Corticosterone	Steroid	HPLC	92
Cyclamate	Sweetener	HPLC	144
Cyclodextrins	Oligosaccharide	HPLC	79

Cysteine	Amino Acid	HPLC	114 - 115
Decanoic Acid	Fatty Acid	HPLC	32
Decyl Beta – D Glucopyranoside	Detergent	HPLC	25
Decyl Beta – D Maltoside	Detergent	HPLC	25
Decyl Sulfate	Detergent	HPLC	145
Dehydro – epi - Andosterone	Steroid	HPLC	28
Deoxyribose	Carbohydrate	HPLC	74
Deoxyribose	Carbohydrate	SFC	49
Dextrans	Carbohydrate	HPLC	11
Dextrose (D - Glucose)	Carbohydrate	HPLC	144
Dimyristolphosphatidyl Choline	Phospholipid	HPLC	95
Diolein	Lipid	HPLC	99
Dimyristolphosphatidyl Glycol	Phospholipid	HPLC	95
Docosanoic Acid	Fatty Acid	SFC	3
Docosanol	Fatty Alcohol	SFC	34
Dodecylcyclophosphoethanolamine	Phospholipid	HPLC	83
Dodecylcyclophosphocholine	Phospholipid	HPLC	83
Dodecylsulfate	Detergent	HPLC	145
Dehydrophenylalanine	Amino Acid	HPLC	126
Eicosanol	Fatty Alcohol	SFC	34
Ergocalciferol	Vitamin	HPLC	101
Estradiol	Steroid	HPLC	29
Estrone	Steroid	HPLC	29
Ethiocolanone	Steroid	HPLC	28
Ethylene Glycol	Glycol	HPLC	141
Fatty Acids	Fatty Acid	CCC	48
Fluorodopa	Amino Acid	HPLC	133
Fructose	Carbohydrate	HPLC	1 - 8 - 11 - 44 - 74 - 75 - 77 - 143
Fructose	Carbohydrate	SFC	10 - 49 - 50
Fructose (Beet)	Carbohydrate	HPLC	45

Fructose (Chervil Root)	Carbohydrate	HPLC	47
Fructose (Tabacco)	Carbohydrate	HPLC	46
Fumaric Acid	Organic Acid	HPLC	38
Galactose	Carbohydrate	HPLC	59 76
Ginseng Saponins	Terpenoid	HPLC	60
Glucose	Carbohydrate	HPLC	1
Glucose	Carbohydrate	SFC	10 - 49 - 50
Glucose (Beet)	Carbohydrate	HPLC	45
Glucose (Chervil Root)	Carbohydrate	HPLC	47
Glucose (Tabacco)	Carbohydrate	HPLC	46
Glutamic Acid	Amino Acid	HPLC	115
Glutamine	Amino Acid	HPLC	114
Hexacameg		HPLC	84
Hexacosanol	Fatty Alcohol	SFC	34
Hexadecanol	Fatty Alcohol	SFC	34
Hexyl Beta – D Glucopyranoside	Detergent	HPLC	25
Histidine	Amino Acid	HPLC	113
Hormonal Steroids	Steroid	HPLC	28
Inositol Phophate	Polyol	HPLC	80
Isoleucine	Amino Acid	HPLC	113
Lactose	Carbohydrate	HPLC	11
Lactulose	Carbohydrate	HPLC	105
Lauric Acid	Fatty Acid	HPLC	40
Lauric Acid	Fatty Acid	SFC	3
Lauryldimethylbenzyl Ammonium Chloride	Detergent	HPLC	145
Laurylpyridium Chloride	Detergent	HPLC	145
Leucine	Amino Acid	HPLC	90

Linoleic Acid	Fatty Acid	HPLC	81 97
Lipid Placebo	Lipid	HPLC	95
Lubrol	Detergent	HPLC	61
Lysine	Amino Acid	HPLC	90
Lysophosphatidyl Choline	Phospholipid	HPLC	5
Lysophosphatidyl Ethanolamine	Phospholipid	HPLC	98
Magnesium	Cation	HPLC	106
Malic Acid	Organic Acid	HPLC	38
Maltodextrins	Polysaccharide	HPLC	35
Mannitol	Polyol	HPLC	44
Mannitol	Polyol	SFC	50
Mannose	Carbohydrate	HPLC	44
Mannose	Carbohydrate	SFC	49
Melibiose	Carbohydrate	HPLC	77
Meso – Erythritol	Polyol	SFC	49
Methyl a,b -D Glucopyranoside	Detergent	HPLC	25
Methionine	Amino Acid	HPLC	113
M-Inositol	Polyol	HPLC	76
Monoolein	Lipid	HPLC	99
Morphine	Alkaloid	SFC	33
Myristic Acid	Fatty Acid	SFC	3
Narcotine	Alkaloid	SFC	33
Nitrate	Anion	HPLC	106
Norleucine	Amino Acid	HPLC	131
Norvaline	Amino Acid	HPLC	132
Octadecanol	Fatty Alcohol	SFC	34
Octyl Beta – D Galactopyranoside	Detergent	HPLC	25
Octyl Beta – D Galactopyranoside	Detergent	SFC	27
Octyl Beta – D Glucopyranoside	Detergent	HPLC	25
Octyl Beta – D Glucopyranoside	Detergent	SFC	27

Octyl Beta – D Xylopyranoside	Detergent	HPLC	25
Octyl Beta – D Xylopyranoside	Detergent	SFC	27
Octyl Beta – Glucoside	Detergent	HPLC	61
Oleic Acid	Fatty Acid	HPLC	97
Opium Alkaloids	Alkaloid	SFC	33
Oxytocyn Acetate	Peptide	HPLC	117
Palmitic Acid	Fatty Acid	HPLC	97
Palmitic Acid	Fatty Acid	SFC	3
Parafilm	Hydrocarbon	HPLC	42
Parafilm	Hydrocarbon	SFC	43
Peptides	Peptide	HPLC	93
Phenobarbital	Anticonvulsant	SFC	12
Phenylalanine	Amino Acid	HPLC	113
Phenylbutazone	NSAID	SFC	12
Phosphatidic Acid	Phospholipid	HPLC	5
Phosphatidyl Choline	Phospholipid	HPLC	5
Phosphatidyl Ethanolamine	Phospholipid	HPLC	5
Phosphatidyl Glycerol	Phospholipid	HPLC	98
Phosphatidyl Inositol	Phospholipid	HPLC	5
Phosphatityl Serine	Phospholipid	HPLC	5
Pinitol	Polyol	HPLC	56
Polybutylene Glycol	Polymer	HPLC	86
Polyethoxylated Alcohols	Polymer	HPLC	87
Polyethoxylated Alcohols	Polymer	SFC	87
Polyethylene Bimodal (High MV)	Polymer	GPC	70
Polyethylene Glycol PEG 10 Tridecyl Ether	Detergent	HPLC	61
Polyethylene Glycol PEG 1450	Polymertd>	HPLC	54

Polyethylene Glycol PEG 1450	Polymer	SFC	88
Polyethylene Glycol PEG 300	Polymer	HPLC	21
Polyethylene Glycol PEG 300, 400	Polymer	SFC	51
Polyethylene Glycol PEG 400	Polymer	HPLC	23
Polyethylene Glycol PEG 600	Polymer	HPLC	24
Polyethylene (NBS 1475)	Polymer	GPC	69
Polyoxyethylene Alcohol C12 E7	Polymer	HPLC	19
Polyoxyethylene Alcohol C12 E9	Polymer	HPLC	17
Polyoxyethylene Alcohol C16 E7	Polymer	HPLC	20
Polyoxyethylene Alcohol C16 E10	Polymer	HPLC	18
Polyoxyethylene Alcohol C18 E10	Polymer	HPLC	16
Polyoxyethylene Alcohols	Polymer	HPLC	89
Polysaccharides (In Beer)	Carbohydrate	HPLC	9
Polysorbate 20	Polymer	HPLC	15
Polystyrene (Dow 1683)	Polymer	GPC	68
Polystyrene Standards	Polymer	GPC	62 - 63 - 64 - 65 - 66 - 67
Potassium	Cation	HPLC	106 - 107 - 111
Prednisolone	Steroid	SFC	12
Progesterone	Steroid	HPLC	28
Proline	Amino Acid	HPLC	113 - 114 - 134
Raffinose	Carbohydrate	HPLC	1 - 11 - 74 - 75 - 77
Raffinose	Carbohydrate	SFC	10

Raffinose (Beet)	Carbohydrate	HPLC	45
Rhamnose	Carbohydrate	HPLC	74
Saccharin	Sweetener	HPLC	144
Serine	Amino Acid	HPLC	114
Sodium Dodecyl Sulfate	Detergent	HPLC	61
Sodium	Cation	HPLC	106
Sorbitol	Polyol	HPLC	1
Sorbitol	Polyol	SFC	50
Soybean Oil (Hydrolyzed)	Lipid	HPLC	118
Sphingomyelin	Phospholipid	HPLC	5
Stachyose	Carbohydrate	HPLC	75
Stearic Acid	Triglycerides	HPLC	97
Stearic Acid	Triglycerides	SFC	3
Stigmasterol	Steroid	HPLC	97
Succinic Acid	Organic Acid	HPLC	38
Sucralose	Sweetener	HPLC	143
Sucrose (Saccharose)	Carbohydrate	HPLC	1 - 8 - 11 - 74 - 75 - 77 - 143
Sucrose (Saccharose)	Carbohydrate	SFC	10
Sucrose (Beet)	Carbohydrate	HPLC	45
Sucrose (Chevil Root)	Carbohydrate	HPLC	47
Sucrose (Tabacco)	Carbohydrate	HPLC	46
Sugars (Mono-Oligosaccharides)	Carbohydrate	HPLC	76
Sugars (Douglas Fir Needles)	Carbohydrate	HPLC	56
Sugars (Milk)	Carbohydrate	HPLC	59
Sugars (Tabacco)	Carbohydrate	HPLC	8
Sulfate	Anion	HPLC	106

Surfactants	Detergent	HPLC	145
Tartaric Acid	Organic Acid	HPLC	38
Tergitol	Detergent	HPLC	61
Tetracosanoic Acid	Fatty Acid	SFC	3
Tetradecanol	Fatty Alcohol	SFC	34
Threonine	Amino Acid	HPLC	114
Alpha – Tocopherol	Vitamin	HPLC	97
Beta – Tocopherol	Vitamin	HPLC	97
Delta – Tocopherol	Vitamin	HPLC	97
Gamma – Tocopherol	Vitamin	HPLC	97
Triaccontanol	Fatty Alcohol	SFC	34
Trilaurin	Lipid	SFC	4
Trimyristin	Lipid	SFC	4
Triolein	Lipid	HPLC	99
Tripalmitin	Lipid	SFC	4
Tristearin	Lipid	SFC	4
Triton X 100	Detergent	HPLC	22
Tryptophan	Amino Acid	HPLC	113
Tyrosine	Amino Acid	HPLC	113
Urea	Carbamide	HPLC	78
Valine	Amino Acid	HPLC	113
Vitamin A	Vitamin	HPLC	100
Vitamin D2	Vitamin	HPLC	101
Vitamin E	Vitamin	HPLC	100
Vitamin E1	Vitamin	HPLC	101
Vitamin K	Vitamin	HPLC	100
Vitamin K1	Vitamin	HPLC	101
Xylene Sulfonate	Detergent	HPLC	145
Xylitol	Polyol	SFC	49
Xylose	Carbohydrate	HPLC	76
Zwittergent 3 14	Detergent	HPLC	61