

Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 1

Agilent Part Number: 5190-0551

Sample Lot Number: LC01057

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
ACEPHATE	30560-19-1	99.7	99.9
AZACONAZOLE	60207-31-0	98.7	100.5
AZINPHOS-ETHYL	2642-71-9	99.9	100.5
BUPROFEZIN	69327-76-0	99.2	100.0
CYMIAZOL HYDROCHLORIDE	61676-87-7	97.7	102.5
CYPROCONAZOLE	13096-99-4	99.5	100.5
DIFLUFENICAN	83164-33-4	97.9	99.8
DIMETHACHLOR	50563-36-5	99.9	100.0
DIMOXYSTROBIN	149961-52-4	99.9	100.0
DISULFOTON	298-04-4	99.5	100.5
FENAMIPHOS	22224-92-6	99.9	100.0
FLUFENACET	142459-58-3	99.8	100.0
FLUOPICOLIDE	239110-15-7	99.9	100.0
FOSTHIAZATE	98886-44-3	98.6	100.0
GUTHION	86-50-0	99.9	100.0
ISOFENPHOS-METHYL	99675-03-3	98.8	100.0
ISOPROTHIOLANE	50512-35-1	99.9	100.5
LENACIL	2164-08-1	97.0	99.9
METHAMIDOPHOS	10265-92-6	99.9	100.5
PROCHLORAZ	67747-09-5	99.1	100.0
PROQUINAZID	189278-12-4	99.9	100.5
CYCLOATE (RO-NEET)	1134-23-2	99.9	100.0
SPIRODICLOFEN	14877-71-8	99.3	100.0
SPIROXAMINE	118134-30-8	98.8	100.0
TRALKOXIDYM	87820-88-0	99.3	100.0
MYCLOBUTANIL	88671-89-0	99.2	100.0

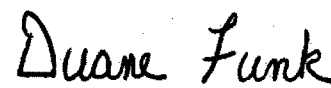
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

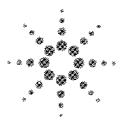
This standard has been produced gravimetrically using ISO9001 quality procedures. NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is $\mu\text{g/mL} \pm 0.5\%$, uncertainty based upon balance and Class A volumetric glassware.

Date of Manufacture: 06 JUNE 2013

Date of Expiration: 06 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 2

Agilent Part Number: 5190-0551

Sample Lot Number: LC01058

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
AZAMETHIPHOS	35575-96-3	99.8	100.0
BEZALAXYL	71626-11-4	99.5	100.0
BIFENTRIN	82657-04-3	99.5	100.0
BROMUCONAZOL	116255-48-2	99.9	100.0
BUPIRIMATE	41483-43-6	99.9	100.0
CHLORFENVINPHOS	470-90-6	98.8	100.5
CHLORPYRIPHOS-METHYL	5598-13-0	98.3	100.0
COUMAPHOS	56-72-4	99.9	100.5
DIAZINON	333-41-5	98.3	100.0
DICHLORVOS	62-73-7	98.7	100.5
DINICONAZOLE	83657-24-3	99.5	100.0
DURSBAN	2921-88-2	99.9	100.0
EPOXICONAZOL	106325-08-0	98.5	100.0
ETHION	563-12-2	99.9	100.0
FENARIMOL	60168-88-9	99.9	100.5
FENBUCANOZOLE	114369-43-6	99.5	100.5
FLUDIOXONIL	131341-86-1	99.9	100.0
FLUQUINCONAZOLE	136426-54-5	99.4	100.0
FLUSILAZOLE	85509-19-9	99.8	100.5
HEXACONAZOLE	79983-71-4	99.7	100.0
IMAZALIL	35554-44-0	99.9	100.0
IPCONAZOLE	125225-28-7	98.0	100.0
METCONAZOLE	125116-23-6	99.5	100.5
ETHOPROP	13194-48-4	99.2	100.0
TEBUCONAZOLE	107534-96-3	99.0	100.0
TETRACONAZOLE	112281-77-3	98.7	100.0
PROPICONAZOLE	60207-90-1	99.7	100.5
TRICYCLAZOL	41814-78-2	98.9	100.5
TRITICONAZOLE	131983-72-7	98.7	100.0
UNICONAZOLE-P	83657-17-4	99.5	100.5
VAMIDOTHION	2275-23-2	98.6	100.0

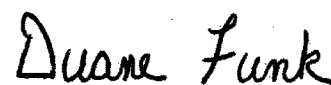
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

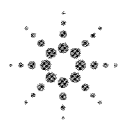
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Date of Manufacture: 04 JUNE 2013

Date of Expiration: 04 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 3

Agilent Part Number: 5190-0551

Sample Lot Number: LC01059

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
BITERTANOL	55179-31-2	99.5	100.0
CLETHODIM	99129-21-2	98.6	100.0
DIFENOCONAZOLE	119446-68-3	99.5	100.5
ETOFENPROX	80844-07-1	97.9	99.8
FENHEXAMID	126833-17-8	99.7	100.0
FORAMSULFURON	173159-57-4	96.9	100.0
INDOXACARB	144171-61-9	93.7	108.2
ISOXAFLUTOLE	141112-29-0	99.9	100.0
MALAOXON	1634-78-2	94.0	100.5
MALATHION	121-75-5	99.9	100.5
MECARBAM	2595-54-2	98.4	100.5
MEPANIPYRIM	110235-47-7	99.9	100.0
METALAXYL	57837-19-1	99.9	100.5
METAZACHLOR	57129-08-2	99.9	100.0
METHIDATHION	950-37-8	99.9	100.0
METOLACHLOR	51218-45-2	99.0	100.0
MOLINATE	2212-67-1	99.9	100.0
OXADIAZON	19666-30-9	99.9	100.5
OXADIXYL	77732-09-3	99.9	100.5
PACLOBUTRAZOL	76738-62-0	99.9	100.5
PENCONAZOLE	66246-88-6	99.1	100.0
PHENTHOATE	2597-03-7	97.2	100.6
MEVINPHOS	7786-34-7	95.2	100.4
PHOSPHAMIDON (MIX OF ISOMERS)	13171-21-6	98.4	141.0
PICOLINAFEN	137641-05-5	99.9	100.0
PIRIMICARB	23103-98-2	99.9	100.0
PIRIMIPHOS-METHYL	29232-93-7	99.6	100.0
PROCYMIDONE	32809-16-8	99.7	100.5
PROFENFOS	41198-08-7	99.3	100.5
PROPYZAMIDE	23950-58-5	99.2	100.0

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
PROPHAM	122-42-9	99.9	100.0
PENDIMETHALIN (PENOXALIN)	40487-42-1	99.9	100.5
QUINALFOS	13593-03-8	99.9	100.0
QUINOXYFEN	124495-18-7	99.5	100.5
PROPETAMPHOS	31218-83-4	99.9	100.5
TEBUFENPYRAD	119168-77-3	99.5	100.5
TEPRALOXYDIM	149979-41-9	98.9	100.0
TERBUFOS	13071-79-9	99.9	100.0
TOLCLOFOS METHYL	57018-04-9	99.5	100.0
TOLYLFLUANID	731-27-1	99.3	100.0
TRIADIMEFON	43121-43-3	99.7	100.0
TRIAZOPHOS	24017-47-8	98.6	100.0
TRIFLUMIZOL	68694-11-1	99.5	100.0
PHOSALONE	2310-17-0	99.9	100.0

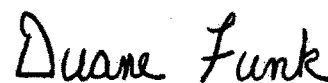
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

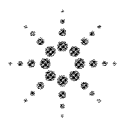
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Date of Manufacture: 04 JUNE 2013

Date of Expiration: 04 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 4

Agilent Part Number: 5190-0551 **Sample Lot Number:** LC01060

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
AMIDOSULFURON	120923-37-7	99.9	100.0
AMINOCARB	2032-59-9	99.9	100.0
BENFURACARB	82560-54-1	97.3	100.2
BOSCALID	188425-85-6	99.9	100.0
BUTOCARBOXIM	34681-10-2	99.3	100.5
CARFENTRAZONE-ETHYL	128639-02-1	96.0	99.8
CHLORIDAZON	1698-60-8	99.9	100.0
CHLORSULFURON	64902-72-3	98.5	100.0
CLOFENTEZINE	74115-24-5	99.9	100.5
CYAZOFAMID	120116-88-3	98.4	100.5
CYMOXANIL	57966-95-7	99.1	100.5
DEET	134-62-3	99.5	100.0
DIFLUBENZURON	35367-38-5	98.0	100.0
ETHIRIMOL	23947-60-6	96.0	100.0
ETHOFUMESATE	26225-79-6	99.9	100.5
FAMOXADONE	131807-57-3	99.5	100.5
FIPRONIL	120068-37-3	97.5	99.9
FLAZASULFURON	104040-78-0	99.1	100.0
FLUFENOXURON	101463-69-8	98.4	100.5
FUBERIDAZOLE	3878-19-1	99.4	100.5
HEXYTHIAZOX	78587-05-0	99.9	100.0
ISOCARBOPHOS	24353-61-5	96.7	100.0
ISOXABEN	82558-50-7	97.6	100.0
KRESOXIM-METHYL	143390-89-0	96.2	100.0
LINURON	330-55-2	97.2	100.1
LUFENURON	103055-07-8	99.7	100.0
MANIPROPAMID	374726-62-2	98.8	100.5
METAFLUMIZONE	139968-49-3	99.3	100.0
METAMITRON	41394-05-2	99.5	100.0
METRAFENONE	220899-03-6	99.9	100.0

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
METRIBUZIN	21087-64-9	99.9	100.0
METSULFURON	74223-64-6	99.5	100.5
MONOCROTOPHOS	6923-22-4	99.9	100.5
NICOSULFURON	111991-09-4	99.5	100.0
NOVALURON	116714-46-6	99.0	100.0
PROPARGITE	2312-35-8	98.5	99.5
PHENMEDIPHAM	13684-63-4	99.7	100.5
TRIFLUMURON	64628-44-0	98.8	100.0
PHOXIM	14816-18-3	98.0	100.0
QUINOCLAMINE	2797-51-5	99.9	100.5
PROMETON	1610-18-0	99.9	100.5
TRIBENURON METHYL	101200-48-0	99.5	100.0
OXASULFURON	144651-06-9	99.5	100.0
PROPAQUIZAFOP	111479-05-1	99.5	100.0
PROSULFOCARB	52888-80-9	99.1	100.0
RIMSULFURON	122931-48-0	99.8	100.0
TRIASULFURON	82097-50-5	97.4	99.9
SILTHIOFAM	175217-20-6	99.7	100.0
THIFENSULFURON METHYL	79277-27-3	95.7	100.0
TEFLUBENZURON	83121-18-0	98.8	100.0

Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

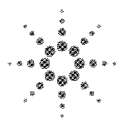
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Date of Manufacture: 3 Jun 2013

Date of Expiration: 3 Jan 2014

Duane Funk

Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 5

Agilent Part Number: 5190-0551

Sample Lot Number:

LC01061

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
ACETAMIPRID	135410-20-7	99.9	100.0
ALANYCARB	83130-01-2	96.7	100.0
ALDICARB	116-06-3	99.9	100.5
AZOXYSTROBIN	131860-33-8	99.9	100.0
CARBENDAZIM	10605-21-7	99.9	100.5
CARBOXIN	5234-68-4	99.9	100.0
DIMETHOMORPH	110488-70-5	99.0	100.0
DIURON	330-54-1	99.9	100.5
FENAMIDONE	161326-34-7	99.9	100.0
FENAZAQUIN	120928-09-8	99.9	100.0
FENOBUARB	3766-81-2	98.0	100.0
FENPROPIDINE	67306-00-7	97.3	99.7
FENPYROXIMATE	134098-61-6	99.5	100.0
IMIDACLOPRID	138261-41-3	99.4	100.5
IPTROVALICARB	140923-17-7	98.9	100.0
METHABENZTHIAZURONE	18691-97-9	99.9	100.0
METHOMYL	16752-77-5	99.9	100.0
METHOXYFENOZIDE	161050-58-4	99.5	100.0
OXAMYL	23135-22-0	99.9	100.0
PICOXYSTROBIN	117428-22-5	99.9	100.0
PROPAMOCARB	24579-73-5	99.3	100.0
PYRACLOSTROBIN	175013-18-0	99.9	100.0
PYRIDABEN	96489-71-3	99.7	100.5
PYRIDAT	55512-33-9	99.5	100.0
PYRIPROXYFEN	95737-68-1	99.0	100.0
TEBUFENOZIDE	112410-23-8	99.9	100.5
THIABENDAZOLE	148-79-8	99.2	100.0
THIACLOPRID	111988-49-9	99.9	100.0
THIAMETOXAM	153719-23-4	99.7	100.0
THIODICARB	59669-26-0	99.9	100.5

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
THIOFANOX	39196-18-4	99.0	100.0
TRIFLOXYSTROBIN	141517-21-7	98.9	100.0

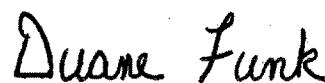
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

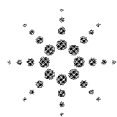
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Date of Manufacture: 05 JUNE 2013

Date of Expiration: 05 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 6

Agilent Part Number: 5190-0551

Sample Lot Number:

LC01062

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
CARBOSULFAN	55285-14-8	98.2	100.0
DIETHOFENCARB	87130-20-9	99.5	100.0
FENOXYCARB	72490-01-8	99.6	100.5
FLONICAMID	158062-67-0	99.5	100.0
FLUMIOXAZIN	103361-09-7	98.1	100.5
FURATHIOCARB	65907-30-4	99.6	100.0
MESOSULFURAN-METHYL	20846-51-8	99.6	100.5
OMETHOATE	1113-02-6	88.9	100.4
PENCYCURON	66063-05-6	99.9	100.0
PHOSMET	732-11-6	99.9	100.0
PROPOXUR	114-26-1	96.1	99.9
PYRIMETHANIL	53112-28-0	99.9	100.0
CARBARYL	63-25-2	99.9	100.0
SPIROMESIFEN	283594-90-1	99.7	100.5
SPIROTETRAMAT	203313-25-1	99.6	100.0
SULFENTRAZONE	122836-35-5	99.5	100.5
TRIADIMENOL	55219-65-3	98.3	100.5
TRICHLORFON	52-68-6	99.9	100.0
TRIETAZIN	1912-26-1	99.2	100.0
ZOXAMIDE	156052-68-5	99.6	100.0
TRIMETHACARB	2655-15-4	97.9	99.8

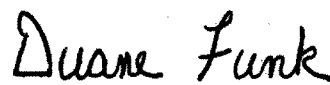
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

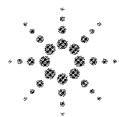
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Date of Manufacture: 03 JUNE 2013

Date of Expiration: 03 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 7

Agilent Part Number: 5190-0551 **Sample Lot Number:** LC01063

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
MIXTURE OF AVERMECTIN B1a and B1b (a)	71751-41-2	95.3	100.0
TEMEPHOS	3383-96-8	97.6	100.5
BENZOXIMATE	29104-30-1	99.1	100.0
BISPYRIBAC SODIUM SALT	125401-92-5	99.9	100.0(b)
CHLOROTOLURON	15545-48-9	99.9	100.0
CHLOROXYURON	1982-47-4	99.9	100.0
CYCLURON	2163-69-1	99.5	100.0
DINOTEFURAN	165252-70-0	98.9	100.0
DIOXACARB	6988-21-2	98.7	100.5
FENURON	101-42-8	96.6	100.0
FLUBENDIAMIDE	272451-65-7	98.8	100.0
FORCHLORFENURON	68157-60-8	99.9	100.0
FURALAXYL	57646-30-7	99.9	100.0
HEXAFLUMURON	86479-06-3	99.2	100.5
HYDRAMETHYLNON (AMDRO)	67485-29-4	99.5	100.0
MIXTURE OF IVERMECTIN B1a and B1b (c)	70288-86-7	94.0	100.5
METHIOCARB	2032-65-7	99.9	100.0
METHOPROTRYNE	841-06-5	96.1	99.9
MOXIDECTIN	113507-06-5	97.1	100.0
NITENPYRAM	150824-47-8	99.9	100.0
PROMECARB	2631-37-0	99.9	100.0
PYMETROZIN	123312-89-0	99.9	100.0
PYRACARBOLID	24691-76-7	99.8	100.0
QUINMERAC	90717-03-6	98.2	100.5
ROTENONE	83-79-4	99.9	100.5
SECBUMETON	26259-45-0	94.5	100.1
SPINOSAD A&D	168316-95-8	98.0	100.5
TEBUTHIURON	34014-18-1	98.6	100.0
THIDIAZURON	51707-55-2	99.9	100.5
MEXACARBATE	315-18-4	98.9	100.0

Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

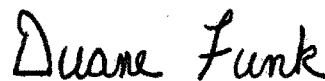
- (a) Concentration adjusted for B1a as the predominant isomer. The isomeric ratio is B1a 92.4%, B1b 2.9%.
- (b) As free acid
- (c) Concentration adjusted for B1a as the predominant isomer. The isomeric ratio is B1a 94.0%, B1b 3.0%.

Traceability:

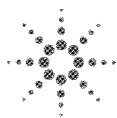
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Date of Manufacture: 05 JUNE 2013

Date of Expiration: 05 JUNE 2014



Duane Funk
Quality Manager
Supelco, Inc.



Certificate of Composition

LC/MS Pesticide Comprehensive Test Mix Kit Sub Mix 8

Agilent Part Number: 5190-0551

Sample Lot Number: LC01064

Analyte	CAS#	Neat material Purity (%)	Analyte Concentration (µg/mL)
BEFLUBUTAMID	113614-08-7	99.9	100.5
BIFENAZATE	149877-41-8	99.9	100.0
CARBOFURAN	1563-66-2	99.9	100.0
CHLORANTRANILIPROLE	500008-45-7	98.3	100.0
CLOMAZONE	81777-89-1	99.8	100.0
CYPRODINIL	121552-61-2	99.5	100.0
DESMEDIPHAM	13684-56-5	98.1	100.5
DIMETHOATE	60-51-5	99.4	100.5
SULFADIAZOLE	30043-49-3	99.9	100.0
ETHYOXYQUIN	91-53-2	92.4	100.5
FLUAZINAM	79622-59-6	98.5	100.5
FLUMETSULAM	98967-40-9	98.8	100.0
FLUOMETURON	2164-17-2	99.9	100.5
FLUOXASTROBIN	361377-29-9	99.5	100.0
FLUTRIAFOL	76674-21-0	98.1	100.0
HALOFENOZIDE	112226-61-6	99.7	100.0
HALOSULFURON-METHYL	100784-20-1	98.1	100.0
METHACRIFOS	62610-77-9	97.6	100.5
METOBROMURON	3060-89-7	98.1	100.5

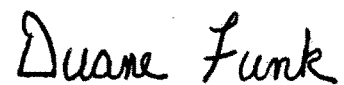
Solvent Composition	CAS#	Material Purity (%)
Acetonitrile	75-05-8	99.9

Traceability:

This standard has been produced gravimetrically using ISO9001 quality procedures. NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is µg/mL $\pm$ 0.5%, uncertainty based upon balance and Class A volumetric glassware.

Date of Manufacture: 06 JUNE 2013

Date of Expiration: 06 JUNE 2014

A handwritten signature in black ink that reads "Duane Funk". The signature is written in a cursive style with a horizontal line underneath it.

Duane Funk
Quality Manager
Supelco, Inc.