



MULTIFUNCTIONAL ANTIMICROBIAL AND PRESERVATIVE REFERENCE GUIDE

	No.	Product Name	INCI Name	Multifunctional Antimicrobial	NPA Approved	Whole Foods Premium Listed	Natural	Naturally Derived	Globally Approved	Broad Spectrum	Effective pH Range 3 – 6.5	Effective pH Range 3 – 10	Typical Use Level %	Physical Form	Water Solubility
Natural / Naturally Derived Preservatives	1	Linatural™ CO-NLP-1	Certified Organic Orange / Lemon Grass / Sunflower Oils / Natural Alcohol Denatured Naturally	•	•	•	•	•	•	•	•	•	0.75 – 2.0	Oil	Dispersible
	2	Linatural™ MBS-1	Propanediol (Natural) / Ethylhexylglycerin / Potassium Sorbate <i>Patented</i>					•	•	•	•		0.5 – 2.0	Clear liquid	Soluble
	3	Linatural™ MBS-3	Caprylic Acid (Natural)/Propanediol (Natural)/Lauric Acid (Natural) <i>Patent Pending</i>		•	•			•	•	•		0.5 – 2.0	Clear liquid	Dispersible
	4	Linatural™ MBS-4~	Propanediol (Natural) / Ethylhexylglycerin / Benzoic Acid <i>Patent Pending</i>	•				•	•	•			0.5 – 2.0	Clear liquid	<1.3%
	5	Linatural™ MBS-5~	Propanediol (Natural) / Phenethyl Alcohol / Benzoic Acid <i>Patent Pending</i>	•				•	•	•			0.5 – 2.0	Clear liquid	<1.3%
	6	Linatural™ MBS-8**	Glycerin / Ethylhexylglycerin / Caprylyl Glycol / Phenethyl Alcohol	•	•				•	•	•		0.5 – 2.0	Clear liquid	<1.3%
	7	Linatural™ NLP-0	Orange / Lemon Grass / Sesame Oils / Natural Alcohol Denatured Naturally	•	•	•	•		•	•	•		0.75 – 2.0	Oil	Dispersible
	8	Linatural™ PA Plus~	Phenethyl Alcohol (Natural) / Glycerin / Benzoic Acid <i>Patent Pending</i>	•	•	•			•	•	•		0.5 – 2.0	Clear liquid	<1.3%
	9	Linatural™ PG Plus~	Pentylene Glycol (Natural) / Glycerin / Benzoic Acid <i>Patent Pending</i>	•	•				•	•	•		0.5 – 2.0	Clear liquid	<1.3%
	10	Linatural™ Ultra-1	Propanediol (Natural) / Benzyl Alcohol (Natural) / Pentylene Glycol (Natural) <i>Patent Pending</i>				•		•	•	•		1.0 – 2.0	Clear liquid	<1.3%
	11	Linatural™ Ultra-3	Propanediol (Natural) / Pentylene Glycol (Natural) / Phenethyl Alcohol (Natural) <i>Patent Pending</i>	•		•			•	•	•		1.0 – 2.0	Clear liquid	<1.3%
Alternative Preservatives <small>Free of Parabens, Formaldehyde Donors, Isothiazolinones</small>	12	Lincoserve™ BDHA	Benzyl Alcohol / Dehydroacetic Acid			•			•	•	•		0.2 – 0.8	Clear liquid	Soluble
	13	Lincoserve™ BDP	Benzoic Acid / Dehydroacetic Acid / Phenoxyethanol			•			•	•	•		0.2 – 1.2	Clear liquid	Soluble
	14	Lincoserve™ CG	Caprylyl Glycol – >99% Purity	•		•				•	•		0.2 – 1.0	Clear liquid	<0.3%
	15	Lincoserve™ CG-2	Caprylyl Glycol / Phenoxyethanol / Hexylene Glycol							•	•		0.5 – 1.5	Clear liquid	<1.2%
	16	Lincoserve™ CG-5	Caprylyl Glycol / Phenoxyethanol / Potassium Sorbate / Hexylene Glycol / Water							•	•		0.5 – 1.5	Clear liquid	<1.2%
	17	Lincoserve™ CG-7	Phenoxyethanol / Caprylyl Glycol / Ethylhexylglycerin / Hexylene Glycol							•	•		0.5 – 1.5	Clear Liquid	<1.2%
	18	Lincoserve™ HpH-6**	Phenoxyethanol / Caprylyl Glycol / Ethylhexylglycerin			•			•	•	•		0.5 – 1.5	Clear liquid	<1.2%
	19	Lincoserve™ PA-1	Phenethyl Alcohol / Benzoic acid / Sorbic acid			•			•	•	•		0.5 – 1.2	Clear liquid	<1.2%
	20	Lincoserve™ PA-2	Phenethyl Alcohol / Caprylyl Glycol / Ethylhexylglycerin	•		•			•	•	•		0.5 – 1.5	Clear liquid	<1.2%
	21	Lincoserve™ PE610	Phenoxyethanol / Benzoic Acid / Ethylhexylglycerin / Glycereth 2- Cocoate					•	•	•	•		0.3 – 1.0	Clear liquid	Soluble
	22	Lincoserve™ PE815	Phenoxyethanol / Ethylhexylglycerin			•				•	•		0.5 – 1.0	Clear liquid	<1.2%
	23	Lincoserve™ SSB	Sodium Benzoate / Sodium Salicylate / Water					•	•	•	•		0.5 – 2.0	Clear liquid	<1.2%
	24	Lincoserve™ WpH-LO	Pentylene Glycol (Natural) / Propanediol (Natural) / Caprylyl Glycol / Ethylhexylglycerin <i>Patent Pending</i>	•				•	•	•	•		0.5 – 2.0	Clear liquid	<1.2%
Lintelligence IQ <small>Value added multifunctional antimicrobials preservatives</small>	25	Lintelligence™ IQ-E1**	Pentylene Glycol (Natural) / Caprylyl Glycol / Ethylhexylglycerin / Vitamin E	•				•	•	•		0.5 – 2.0	Clear liquid	<1.2%	
	26	Lintelligence™ IQ-E2**	Phenoxyethanol / Glycerin / Ethylhexylglycerin / Vitamin E			•			•	•		0.5 – 2.0	Clear liquid	<1.2%	
	27	Lintelligence™ IQ-PCA-1**	Potassium Sorbate / Sodium Salicylate / Sodium Benzoate / Sodium PCA / Water						•	•	•		0.5 – 2.0	Clear liquid	Soluble

~ Max Usage Level of 1.3% due to level of Benzoic Acid allowed in Japan | ~ Pentylene Glycol is whole Food Listed (Not Premium) ** New for 2016



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Anhydrous Preservatives

Conventional Preservatives

No.	Product Name	INCI Name	Multifunctional Antimicrobial	Globally Approved	Broad Spectrum	Bactericidal Activity	Fungicidal Activity	Effective pH Range 3 – 6.5	Effective pH Range 3 – 10	Typical Use Level %	Physical Form	Water Solubility
28	Lincoserve™ CP-DHA**	Chlorphenesin / Dehydroacetic Acid	•	•	•	•	•	•	•	0.1 – 0.6	Powder	Limited
29	Lintelligence™ IQ-LL-1**	Lauroyl Lysine / Chlorphenesin / Dehydroacetic Acid	•	•	•	•	•	•	•	0.5 – 2.0	Powder	Limited
30	Lintelligence™ IQ-TLLA**	Talc / Lauroyl Lysine / Allantoin / Chlorphenesin / Dehydroacetic Acid (Powder Concentrate)	•	•	•	•	•	•	•	30 – 40	Powder	Limited
31	Lincocide™ C	20% Chlorohexidine Gluconate USP	•	•	•	•	•	•	•	0.05 – 0.2	Clear liquid	Miscible
32	Lincocide™ DU	Diazolidinyl Urea	•	•	•	•	•	•	•	0.05 – 0.5	Powder	>60%
33	Lincocide™ H	DMDM Hydantoin	•	•	•	•	•	•	•	0.05 – 0.6	Clear liquid	Soluble
34	Lincocide™ H-II	DMDM Hydantoin / Methyl and Propyl Paraben / Propylene Glycol	•	•	•	•	•	•	•	0.04 – 0.8	Clear liquid	<1%
35	Lincocide™ H-III	DMDM Hydantoin / Methyl and Propyl Paraben / Phenoxyethanol	•	•	•	•	•	•	•	0.04 – 0.8	Clear liquid	<1%
36	Lincocide™ II	Diazolidinyl Urea / Methyl and Propyl Paraben / Propylene Glycol	•	•	•	•	•	•	•	0.3 – 1.0	Clear liquid	<1%
37	Lincocide™ IP2	2% Iodopropynyl Butylcarbamate / Phenoxyethanol	•	•	•	•	•	•	•	0.5 – 1.0	Clear liquid	<1%
38	Lincocide™ IP	10% Iodopropynyl Butylcarbamate / Phenoxyethanol	•	•	•	•	•	•	•	0.1 – 0.5	Clear liquid	<0.4%
39	Lincocide™ IPBC	Iodopropynyl Butylcarbamate	•	•	•	•	•	•	•	0.0025 – 0.01	Powder	Insoluble
40	Lincocide™ IU	Imidazolidinyl Urea	•	•	•	•	•	•	•	0.05 – 0.5	Powder	>70%
41	Lincocide™ K*	Methyl Chloro Isothiazolinone and Methyl Isothiazolinone	•	•	•	•	•	•	•	0.025 – 0.1	Clear liquid	Miscible
42	Lincocide™ MP	Methyl Paraben	•	•	•	•	•	•	•	0.1 – 0.3	Crystalline	<0.25%
43	Lincocide™ N*	Methyl Isothiazolinone	•	•	•	•	•	•	•	0.05 – 0.1	Clear liquid	Miscible
44	Lincocide™ P	5 Paraben Blend in Phenoxyethanol	•	•	•	•	•	•	•	0.25 – 1.0	Clear liquid	<0.5%
45	Lincocide™ PCMX	Chloroxylonol USP	•	•	•	•	•	•	•	0.3 – 0.5	Crystalline	Limited
46	Lincocide™ PCMX-LQ	17% Chloroxylonol / PEG-8 Laurate / Laureth-4	•	•	•	•	•	•	•	>1.5	Clear liquid	Soluble
47	Lincocide™ PHOE	Phenoxyethanol	•	•	•	•	•	•	•	0.5 – 1.0	Clear liquid	<2.4%
48	Lincocide™ P-MEP	Methyl / Ethyl / Propyl Parabens in Phenoxyethanol	•	•	•	•	•	•	•	0.25 – 1.0	Clear liquid	Soluble
49	Lincocide™ P-MEPB	Methyl / Ethyl / Propyl / Butyl Parabens in Phenoxyethanol	•	•	•	•	•	•	•	0.25 – 1.0	Clear liquid	Soluble
50	Lincocide™ PP	Propyl Paraben	•	•	•	•	•	•	•	0.1 – 0.3	Crystalline	<0.04%
51	Lincocide™ T	Triclosan, USP	•	•	•	•	•	•	•	0.1 – 0.3	Crystalline	Limited
52	Lincocide™ TCC	Triclocarbon	•	•	•	•	•	•	•	0.5 – 1.5	Powder	Insoluble

** New for 2016 * Methyl Chloro/ Methyl Isothiazolinone banned in Europe for leave-on and restricted in rinse-off products.