



Good Quality Comes
From Qualified Materials



SpecPed® SKE(-P)
DIPEPTIDE DIAMINO BUTYROYL BENZYLAMIDE
DIACETATE

Safe, Effective & Needle Free-Botulinum Roxin-like Peptide
Without Sideeffects
Reducing wrinkles by inhibiting muscle contractions

Spec Chem Group
July 16, 2020

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1. Introduction of SpecPed® SKE(-P)

As time passes, frown lines, laughter lines and crows feet lines appear more and more due to the repeated movements of facial muscles. face wrinkles persist permanently and get deeper and deeper.

- SpecPed® SKE is a small tripeptide, having similar structure with snake venom, it helps to make loose skin vitalized, firm and healthy, providing smooth finish.
- SpecPed® SKE is a reversible antagonist of the muscular nicotinic acetylcholine receptor (mnAChR), assuming that the tri-peptide is binding to the epsilon subunit of the mnAChR which prevents binding of acetylcholine to the receptor, consequently mnAChR remains closed, in the closed state, there is no uptake of sodium ions (Na⁺) and the muscles stay relaxed.





2. Product information of SpecPed® SKE(-P)

Product No.: 130023
Trade Name: SpecPed® SKE-P (Powder)
INCI Name: Dipeptide diaminobutyroyl Benzylamide diacetate
CAS No.: 823202-99-9
Application: Anti-wrinkle and etc.
Dosage: 0.0025-0.5% (daily use), 0.5%-1.0%, even more (special use)
Storage: Normal storage:Storage in cool,dry place,protect from light.Long storage:2~ 8℃.
Shelf life: 2 years
Package: 10g, 100g, Customization

Items	Specification
Appearance	White to off-white powder
Molecular Ion Mass	495.58±1
ESI-MASS (Dipeptide diaminobutyroyl Benzylamide)	375±1
Purity (HPLC)	≥98.0%
Total impurities	<2.0%
Single impurity(HPLC)	<1.0%
Acetic acid (HPLC)	≤25.0%
Water Content(Karl Fischer)	≤8.0 %
Peptide Content	≥65%



3. Efficacy Test of SpecPed® SKE(-P)

Product No.: 135023-1	Items	Specification
Trade Name: SpecPed® SKE, 0.25% (Solution)	Appearance	Clear to slightly opaque, Colourless to yellowish, viscous liquid.
INCI Name: Dipeptide diaminobutyroyl Benzylamide diacetate, Aqua, Glycerin, Caprylyl Glycol & Ethylhexylglycerin	Relative Density (d ₂₀ /20)	1.150 ~ 1.220
CAS No.: 823202-99-9, 7732-18-5, 56-81-5, 1117-86-8 & 70445-33-9	Refractive Index (n ₂₅)	1.410 ~ 1.450
Application: Anti-wrinkle and etc.	Peptide content	≥0.25%
Dosage: 1.0-20.0% (daily use), 20.0-50.0%, even more (special use)	pH	4.0-6.0
Storage: Store in cool and dry place, away from light. 2~8℃ for common storage. -20℃ for long time storage.	Aerobic plate count	≤100 cfu/mL
Shelf life: 2 years	Yeast & mould	≤100 cfu/mL
Package: 10g, 100g, Customization	Escherichia coli	Negative
	Salmonella	Negative

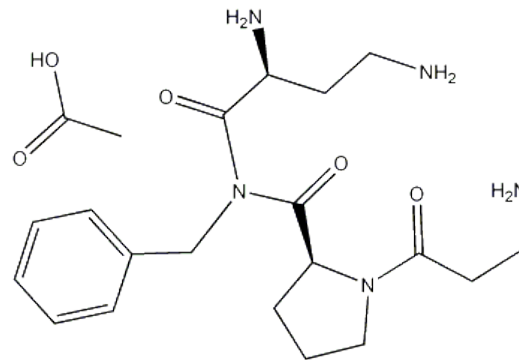
* SpecPed® SKE, 0.1% (Solution), SpecPed® SKE, 0.12% (Solution) and other concentration can be customizable!



2. Product information of SpecPed® SKE(-P)

The Features of SpecPed® SKE(-P)

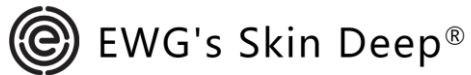
- ❑ All SpecPed® SKE(-P) Series are certificated by HALAL
- ❑ It's a tripeptide (a three amino acid peptide) with molecular weight less than 500 Da, meaning that it's small enough to penetrate nicely and easily into the skin.
- ❑ It belongs to the “Botox in a jar” type of peptides (similar to Argireline or Leuphasyl) targeting wrinkles caused by facial movements, like laughter lines or crow's feet. (Even at 25ppm, It works)
- ❑ It's safe without potential skin risk (no Cancer Risk/Developmental & Reproductive Toxicity /Allergies & Immunotoxicity)
- ❑ It is typical neurotransmitter inhibitory peptides
- ❑ Suitable for lifting & firming, anti-aging application



The Structure of SpecPed® SKE(-P)



2. Product information of SpecPed® SKE(-P)



DIPEPTIDE
DIAMINOBTUROYL
BENZYLAMIDE DIACETATE



EWG
VERIFIED™

Score:



Data: None

Cancer ⓘ



None

High

Developmental &
Reproductive Toxicity ⓘ



None

High

Allergies &
Immunotoxicity ⓘ



None

High

SpecPed® SKE(-P) is safe and without potential skin risk (no Cancer Risk/Developmental & Reproductive Toxicity /Allergies & Immunotoxicity) !



3. Efficacy Test of SpecPed® SKE(-P)

Clinical (in vivo) Test—Anti-wrinkle Test

Test product:	1% SpecPed® SKE (0.25% solution) acting concentration is only 25ppm
Batch No:	20170628
Subjects:	10
Sex:	Female
Age range:	25 - 55years old;
Test Site:	Face
Application Frequency:	Twice a day after cleaning face in the morning and evening.
Test Period:	4 weeks
Test Parameters:	Determination of skin wrinkle difference is expressed in volume , area and area ratio;volume :used to indicate the size and depth of wrinkles;the value is more lower,the effect is more better;area: used to indicate width and length of wrinkles; the value is more lower,the effect is more better; area ratio: Used to indicate the ratio of wrinkles. the value is more lower,the effect is more better
Test condition:	Temperature:20℃ - 25℃;Humidity:40% - 60%;
Design of Study:	Aim to assess the effect of the test cosmetic product after 2weeks,4weeks and 8 weeks application in the female subject.

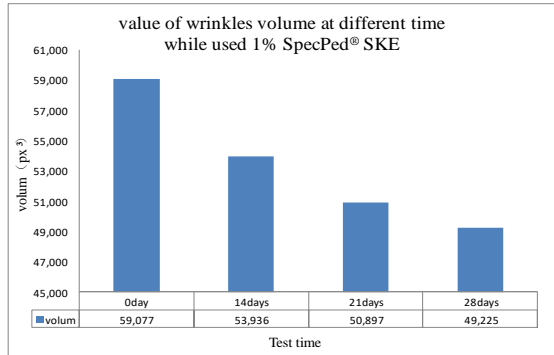




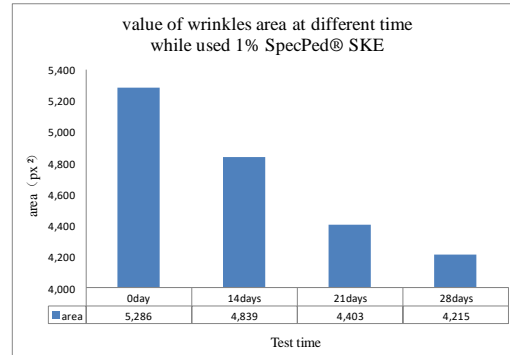
3. Efficacy Test of SpecPed® SKE(-P)

Clinical (in vivo) Test—Anti-wrinkle Testing—Results

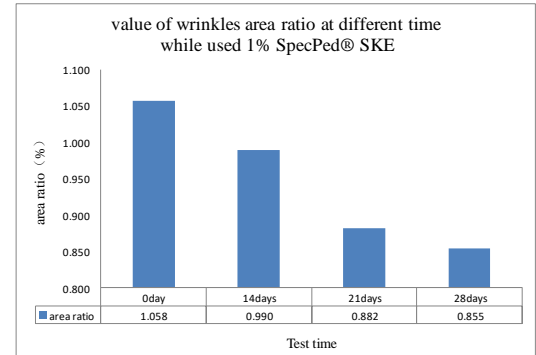
The following Fig-1-1 display the value of wrinkles volume at different time while used 1 % SpecPed® SKE



The following Fig-1-2 display the value of wrinkles area at different time while used 1 % SpecPed® SKE



The following Fig-1-3 display the value of wrinkles area ratio at different time while used 1 % SpecPed® SKE



Comparing with the pre-treated, treating skin with 1 % SpecPed® SKE (0.25% solution) , wrinkles volume reduce 8.70% after 14 days, 13.85% after 21 days, 16.68% after 28 days; wrinkles area reduce 8.47% after 14 days, 16.70% after 21 days, 20.26% after 28 days; Wrinkles area ratio reduce 6.47% after 14 days, 16.62% after 21days, 19.23% after 28 days. The longer the time passed, the better anti-wrinkle effect performed.



3. Efficacy Test of SpecPed® SKE(-P)

Clinical (in vivo) Test—Anti-wrinkle Testing—Results (Pictures)



Fig.1



Fig.2



Fig.3



Fig.4

Fine lines around eyes were improved after treating with 1.0% SpecPed® SKE (0.25% solution)



3. Efficacy Test of SpecPed® SKE(-P)

Clinical (in vivo) Test—Anti-wrinkle Testing—Results (Pictures)



Fig.1



Fig.2



Fig.3



Fig.4

Fine lines were improved after treating with 1.0% SpecPed® SKE (0.25% solution)



4. Application Guide of SpecPed® SKE(-P)

Formulation Example: Anti-wrinkle Cream, 1.0% SpecPed® SKE (0.25% Solution)

Phase	Product Name	INCI Name	Dosage(%)	Supplier
A	EMT-10	Hydroxyethylacrylate / Sodium Acryloyldimethyl Taurate Copolymer	1.2	
	CC	Carbonicacid,dioctylester	2.0	
	SpecKare® 3GF	Glyceryl linoleate(and)Glyceryl oleate(and)Glyceryl linolenate	1.0	SC
	EH	Ethylhexyl Ethylhexanoate	2.0	
	CDM3526	C26-28 Alkyl Dimethicone	0.2	
B	Glycerin	Glycerin	8.0	
	SpecThem® XTG200	Xanthan Gum	0.18	SC
	SpecThem® SCB21	Carbomer	0.15	SC
	H-200	Glycerin (and) Glyceryl Polyacrylate	6.0	
	Water	Aqua	To 100	
	SpecKare® NMF50	Betaine	2.0	SC
C	TEA	Tris(2-Hydroxyethyl)Amine	0.13	
	ParbFree® PCG	Caprylyl Glycol (and) Phenoxyethanol	0.8	SC
	Fragrance		0.02	
	SpecPed® SKE (0.25% Solution)		1	SC





4. Application Guide of SpecPed® SKE(-P)

Commercial Products



Kate Somerville

Line Release Under Eye Repair Cream

Carefully blended complex of peptides that helps reduce the look of puffiness and dark circles promoting a more youthful appearance. Acetyl Hexapeptide-3 reduces the appearance of wrinkles making the eyes look lifted and more contoured.

Ingredients overview

Water, Phenyl Trimethicone, Cyclopentasiloxane, Cyclotetrasiloxane, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, PPG-12/Smdl Copolymer, Glycerin, Theobroma Grandiflorum Seed Butter, Dimethicone, C12-15 Alkyl Benzoate, Dimethiconol, Sodium Polyacrylate, Sodium Stearoyl Glutamate, Phenoxyethanol, Butylene Glycol, Steareth-2, PEG/PPG-18/18 Dimethicone, Carbomer, Cetyl Esters, Ethylhexyl Cocoate, Palmitoyl Oligopeptide, Phospholipids, Sodium PCA, Palmitoyl Tetrapeptide-7, Polysorbate 20, Polyquaternium-51, Sodium Hyaluronate, Trehalose, Urea, Ceramide 2, Cucumis Sativus (Cucumber) Fruit Extract, Ethylhexylglycerin, PEG-10 Rapeseed Sterol, Tocopheryl Acetate, Tribehenin, Hydrolyzed Rice Bran Protein, Acetyl Hexapeptide-3, Ascorbyl Palmitate, Glycolipids, Lecithin, Retinyl Palmitate, Xanthan Gum, Arginine, Glycine, Lysine, Proline, Glycine Soja (Soybean) Oil, Oxido Reductases



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



Eve Rebirth Instant Hyalu-Snake Serum

Ingredients:

Aqua (Water), Propanediol, Sodium Silicate, Sodium Hyaluronate, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Acetyl Tetrapeptide-15, Palmitoyl Hexapeptide-19, Copper Heptapeptide-14 Pantothenate, Heptapeptide-15 Palmitate, Tilia Tomentosa Extract, Achillea Millefolium Extract, Fucus Vesiculosus Extract, Cassia Angustifolia Seed Polysaccharide, Malus Domestica Fruit Cell Culture Extract, Mannitol, Glycerin, Sodium Citrate, Xanthan Gum, Hydroxyethylcellulose, Dextran, Citric Acid, Tetrasodium Glutamate Diacetate, Lecithin, Caprylyl Glycol, Hexylene Glycol, Lactic Acid/Glycolic Acid Copolymer, Polyvinyl Alcohol, Phenoxyethanol, Ethylhexylglycerin.



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



Open Formula Peptide Moisturizer (10% Peptides)

This peptide-based moisturizer is formulated to target fine lines. The peptides are delivered in a plumping cream.

Ingredients overview

Water, Cyclopentasiloxane, Dimethicone Crosspolymer, Glycerin, Butylene Glycol, Carbomer, Polysorbate 20, **Palmitoyl Tripeptide-1**, **Palmitoyl Tetrapeptide-7**, Caprylic/Capric Triglyceride, Cetearyl Alcohol, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Stearic Acid, Isopropyl Myristate, Disodium EDTA, Xanthan Gum, Glyceryl Stearate Citrate, Phenoxyethanol, Caprylyl Glycol, Citric Acid, Sodium Hydroxide



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



L'Oreal

Paris Revitalift Derm Intensives 1.5 % Pure Hyaluronic Acid Serum

Intensive hydrating 1.5% pure Hyaluronic Acid Serum replenishes moisture for plumped, youthfully supple skin with bounce. Light-as-air gel serum absorbs quickly with no tacky feel or leftover residue. Hyaluronic Acid is a potent hydration-attracting molecule naturally found in skin. It enhances skin's own moisture-retention for lasting hydration. This formula scientifically blends 0.5% high molecular weight Hyaluronic Acid and 1% low molecular weight Hyaluronic Acid. Smoother, more supple feeling skin starts day 1. Fragrance free, paraben free. No mineral oil or synthetic dyes. Suitable for sensitive skin. Validated with dermatologists. Intensive hydrating 1.5 percent pure Hyaluronic Acid serum for plumped, youthfully supple skin with bounce Lightweight gel serum absorbs quickly with no tacky feel or leftover residue Smoother, more supple feeling skin starts day 1 - In 1 week, visibly plumps skin Paraben free, fragrance free Made in United States Every morning & evening, apply 2-3 drops to the face and neck, and gently smooth into skin. Avoid the eye area. For best results, please use with other RevitaLift products

Ingredients overview

Aqua/Water, Glycerin, Hydroxyethylpiperazine Ethane Sulfonic Acid, Sodium Hyaluronate, PEG-60 Hydrogenated Castor Oil, Secale Cereale Seed Extract / Rye Seed Extract, Calcium Pantothenate, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Ascorbyl Glucoside, Disodium EDTA, Pentylene Glycol, Phenoxyethanol, Chlorphenesin



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



The Ordinary
Buffet + Copper Peptides 1%
Multi-technology Peptide Serum

Ingredients overview

Aqua (Water), Glycerin, Lactococcus Ferment Lysate, **Copper Tripeptide-1**, **Acetyl Hexapeptide-8**, Pentapeptide-18, **Palmitoyl Tripeptide-1**, **Palmitoyl Tetrapeptide-7**, **Palmitoyl Tripeptide-38**, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Acetylgarginyltryptophyl Diphenylglycine, Sodium Hyaluronate Crosspolymer, Sodium Hyaluronate, Allantoin, Glycine, Alanine, Serine, Valine, Isoleucine, Proline, Threonine, Histidine, Phenylalanine, Arginine, Aspartic Acid, Trehalose, Fructose, Glucose, Maltose, Urea, Sodium Pca, Pca, Sodium Lactate, Citric Acid, Hydroxypropyl Cyclodextrin, Sodium Chloride, Sodium Hydroxide, Butylene Glycol, Pentylene Glycol, Acacia Senegal Gum, Xanthan Gum, Carbomer, Polysorbate 20, Dimethyl Isosorbide, Sodium Benzoate, Caprylyl Glycol, Ethylhexylglycerin, Phenoxyethanol, Chlorphenesin



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



SkinChemists Wrinkle Killer Snake Serum

Ingredients:

Aqua (Water), Butylene Glycol, Glycerin, PEG-12 Dimethicone, Carbopol Borago Officinalis (Borage) Seed Oil, Propylene Glycol, Diazolidinyl Urea, Sodium Hydroxide, Sodium Hyaluronate, Disodium EDTA, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Parfum, Wheat Amino Acids, Phenoxyethanol, Benzyl Salicylate, Hexyl Cinnamal, Limonene, Iodopropynyl Butylcarbamate, Potassium Sorbate.



4. Application Guide of SpecPed® SKE(-P)

Commercial Products

Peter Thomas Roth Serum UnWrinkle Eye



Ingredients:

Water, Glycerin, Aloe Barbadensis Leaf Juice, Boron Nitride, Cyclomethicone, Polysorbate 20, C12-15 Alkyl Benzoate, Prunus Amygdalus Dulcis (Sweet Almond) Oil, Cyclopentasiloxane, Prunus Amygdalus Dulcis (Sweet Almond) Seed Extract, Acetyl Octapeptide-3, Acetyl Hexapeptide-8, Palmitoyl Tripeptide-5, Palmitoyl Oligopeptide, Palmitoyl Tetrapeptide-7, Silica Dimethyl Silylate, Peg-12 Dimethicone, Tocopheryl Acetate (Vitamin E), Retinyl Palmitate (Vitamin A), Dimethicone, Methyl Gluceth-20, Polysorbate 20, Allantoin, Sodium Polyacrylate, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Triethanolamine, Butylene Glycol, Sodium Hyaluronate, Caprylyl Glycol, Hexylene Glycol, Carbomer, Disodium Edta, Phenoxyethanol, Methylparaben, Butylparaben, Ethylparaben, Propylparaben, Isobutylparaben.



4. Application Guide of SpecPed® SKE(-P)

Commercial Products



RAU Express Lift

Anti-Aging Concentrate with Tripeptid, Hyaluronic Acid and Jambu Plant Extract.

Ingredients overview

Aqua (Water), Glycerin, Butylene Glycol, Imperata Cylindrica Root Extract, Alcohol, Sodium Hyaluronate, Acmella Oleracea Extract, **Dipeptide Diaminobutyroyl Benzylamide Diacetate**, Ethylhexylglycerin, Sodium Hydroxide, Tetrasodium Glutamate Diacetate, Acrylates / C10-30 Alkyl Acrylate Crosspolymer, Caprylyl Glycol, Phenoxyethanol, Carbomer

Thank you for your attention!



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