

DECHRA DERMATOLOGY



Why Dechra Dermatology?

Veterinarians' premier choice in Dermatology, Dechra Veterinary Products offers branded solutions for your dermatology needs.

✓TRUSTED INGREDIENTS

Dechra's topical dermatology portfolio is anchored by key ingredients you trust, such as Chlorhexidine, Miconazole and Ketoconazole.

✓CUTTING EDGE TECHNOLOGY

Many of our formulations are enhanced with key ingredients like USP TrizEDTA®, Ceramides and Acetic and Boric Acid.

✓MULTI-MODAL THERAPIES

With multiple options for topical and systemic therapy, you can prescribe products that work together and increase client compliance, such as wipes and sprays for in between baths, or when clients cannot bathe their pets.

✓FDA APPROVED CHOICES

Proven topical and oral options to prescribe with confidence.

For more information on Dechra Veterinary Products' wide range of otic and topical therapies, visit www.dechra-us.com.

To order or schedule a lunch and learn, call your Dechra representative or call (866) 683-0660.



Dechra Technologies

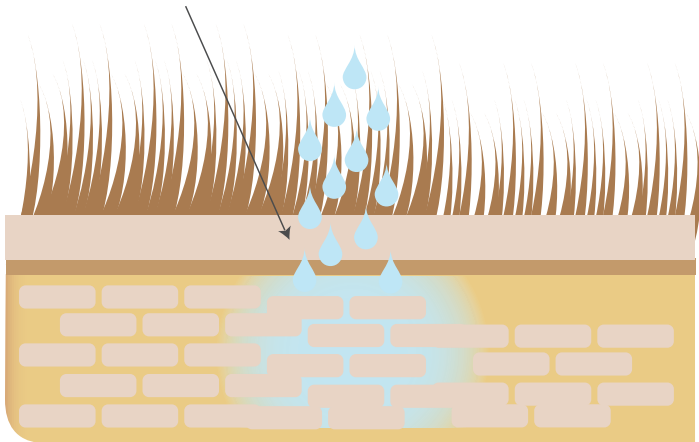
Dechra's topical therapy products offer multiple technologies and active ingredients to offer multi-modal therapies for atopic dermatitis and pyoderma.

Ceramides

- Ceramides play an essential role in the structure and maintenance of the barrier function of the skin. Proper barrier function is necessary to prevent water loss and the entrance of allergens.
- Findings suggest that decreased amounts of ceramides in the skin of dogs with atopic dermatitis may be involved in the impaired barrier function of their skin.¹
- Formulations containing lipids identical to those in skin and, in particular, some ceramide supplementation may improve skin conditions caused by impaired barrier function.

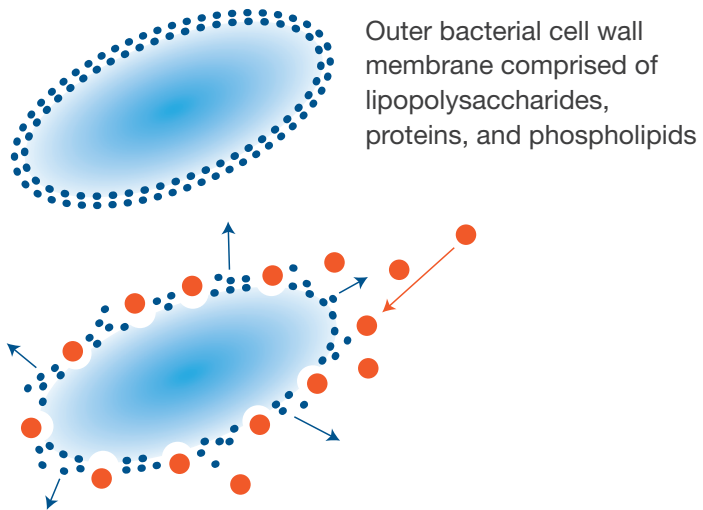
The ceramide complex in Dechra's products is part of a comprehensive skin lipid complex that includes Ceramides 1, 3, and 6 II. It also includes phytosphingosine and cholesterol.

Ceramides rebuild the epidermal skin barrier, helping to retain moisture in the skin and prevent allergen absorption.



TrizEDTA® Technology²

- Patented TrizEDTA® (Tromethamine, USP; Disodium EDTA, USP) composition, U.S. Patent 6,538,155
- Effective against Gram-negative bacteria
- Chelates minerals in bacterial cell walls thereby increasing their susceptibility to active ingredients in topical products
- Alkalinizing
- Antibiofilm agent³
- Non-ototoxic
- For topical use in dogs, cats, and horses



- Introduction of TrizEDTA® into the bacteria's environment releases lipopolysaccharides, proteins, and phospholipids from the cell wall increasing susceptibility to active ingredients.
- TrizEDTA® lowers the bacterial minimum inhibitory concentration (MIC) or the amount of an active ingredient required to inhibit an organism's growth.²

Chlorhexidine Gluconate

- Generally used as adjunctive therapy for bacterial skin infections caused by Gram-positive and Gram-negative bacteria²
- Considered to have residual effects and can remain active on skin after rinsing²
- Bacteria do not tend to develop resistance towards chlorhexidine gluconate
- Antifungal properties in concentrations greater than 3%

Miconazole

- A synthetic antifungal used as adjunctive therapy to assist with yeast/fungal skin infections
- Activity against some Gram-positive bacteria, including methicillin-sensitive and -resistant *Staphylococci*⁴

Ketoconazole

- A synthetic antifungal used as adjunctive therapy to assist with yeast/fungal skin infections

Acetic & Boric Acid Formulation

- Cleansing, drying, acidifying, whitening
- Degreasing, deodorizing
- Balances skin surface pH making it unfavorable for the overgrowth of yeast/fungus
- Ceruminolytic, keratolytic, keratoplastic, and astringent actions⁵

Hydrocortisone

- Provides anti-pruritic and anti-inflammatory properties

¹ Characterization and quantification of ceramides in the nonlesional skin of canine patients with atopic dermatitis compared with controls. Lisa V. Reiter, Sheila M. F. Torres, Philip W. Wertz, Veterinary Dermatology, Volume 20, Issue 4, pages 260–266, August 2009.

² Koch, S.N. (2012). Canine and Feline Dermatology Drug Handbook. Ames: Wiley-Blackwell.

³ Finnegan, S, Percival, SL. EDTA: An Antimicrobial and Antibiofilm Agent for Use in Wound Care. Advances in Wound Care 2015: Jul 1 4(7); 415-421.

⁴ Kirk's Current Veterinary Therapy XV. John D. Bonagura, David C. Twedt Elsevier Health Sciences, 2013.

⁵ Susceptibility of Selected Otitis Externa Pathogens to Individual and Mixtures of Acetic and Boric Acids. Benson CE - 4th Proceedings of AAVD/ACVD meeting, 1998. Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania.





Dechra has a solution to address all your topical therapy needs.

Dechra’s topical dermatology portfolio is anchored by key ingredients you trust such as Chlorhexidine, Miconazole and Ketoconazole. Some of our formulations are also enhanced with other key ingredients like USP TrizEDTA®, ceramide complex, and acetic and boric acid. TrizEDTA® chelates minerals in bacterial cell walls, thereby increasing their susceptibility to active ingredients in Dechra’s topical products.¹ TrizEDTA® is also an antibiofilm agent.² Dogs with atopy are known to be deficient in ceramides.³ Dechra’s ceramide complex contains ceramides 1, 3, and 6 II, cholesterol and phytosphingosine to aid in moisturizing, repairing and restoring damaged skin. In addition, acetic and boric acid offer a unique combination of ingredients not found in other products. MICONAHEX+Triz® and TrizCHLOR® 4 Sprays have proven residual activity up to 10 days.⁴

Skin Condition and Dechra Topical Solution

Dechra Topical	Yeast	Bacteria	Inflammation/ Pruritus	Biofilm	Barrier Repair	Greasy, Waxy	Follicular Condition	Seborrhea
MICONAHEX+Triz® Shampoo, Spray, Wipes & Mousse	2% Miconazole	2% Chlorhexidine, 2% Miconazole, USP TrizEDTA®		USP TrizEDTA®	Ceramide Complex			
MAL-A-KET® Shampoo & Wipes	1% Ketoconazole, 2% Acetic Acid	2% Chlorhexidine, 2% Acetic Acid				2% Acetic Acid		
MAL-A-KET® Plus TrizEDTA® Spray Conditioner	1% Ketoconazole	2% Chlorhexidine, USP TrizEDTA®		USP TrizEDTA®				
MALACETIC® Shampoo, Spray & Wipes	2% Acetic & 2% Boric Acid	2% Acetic Acid, 2% Boric Acid				2% Acetic Acid, 2% Boric Acid		
MALACETIC ULTRA® Shampoo & Spray	0.15% Ketoconazole, 1% Acetic Acid, 2% Boric Acid	1% Acetic Acid, 2% Boric Acid	1% Hydrocortisone		Ceramide Complex	1% Acetic Acid, 2% Boric Acid		
MALACETIC® HC Wipes	1% Acetic Acid, 1% Boric Acid	1% Acetic Acid, 1% Boric Acid	1% Hydrocortisone		Ceramide Complex	1% Acetic Acid, 1% Boric Acid		
TrizCHLOR® 4 Shampoo, Spray, Wipes & Mousse	4% Chlorhexidine	4% Chlorhexidine, USP TrizEDTA®		USP TrizEDTA®				
TrizCHLOR® 4HC Shampoo & Spray	4% Chlorhexidine	4% Chlorhexidine, USP TrizEDTA®	1% Hydrocortisone	USP TrizEDTA®				
DERMABENSs® Shampoo		2.5% Benzoyl Peroxide, 1% Sulfur, 1% Salicylic Acid	2.5% Benzoyl Peroxide (pruritus only)		Ceramide Complex	2.5% Benzoyl Peroxide, 1% Sulfur	2.5% Benzoyl Peroxide	2.5% Benzoyl Peroxide, 1% Sulfur, 1% Salicylic Acid



Dechra is a leader in innovative solutions for ear conditions in pets.

Many of our popular formulations are enhanced with TrizEDTA®, which chelates minerals in bacterial cell walls thereby increasing their susceptibility to active ingredients in topical products.¹ TrizEDTA® is also an antibiofilm agent.² Another enhancement, the ceramide complex, aids in moisturizing, repairing and restoring damaged skin. We have a portfolio of products listed below that address many common ear conditions.

Ear Condition and Dechra Otic Product

Dechra Otic or Flush	Yeast	Bacteria	Biofilm	Inflammation	Pruritus	Greasy, Waxy	Moist
TrizULTRA+KETO® Flush	Ketoconazole	USP TrizEDTA®	USP TrizEDTA®	Non-acidic, Non-stinging			
MALACETIC ULTRA® Otic Cleanser	Ketoconazole; Acetic Acid	Acetic Acid		Hydrocortisone	Hydrocortisone, Ceramide Complex	Acetic Acid	Acetic Acid
MALACETIC® Otic Cleanser	Acetic & Boric Acid	Acetic & Boric Acid				Acetic & Boric Acid	Acetic & Boric Acid
MAL-A-KET® Plus TrizEDTA® Flush	Ketoconazole	Chlorhexidine; TrizEDTA®	USP TrizEDTA®				
TrizEDTA® Aqueous Flush		USP TrizEDTA®	USP TrizEDTA®	Non-acidic, Non-stinging			
TrizCHLOR® Flush		Chlorhexidine; USP TrizEDTA®	USP TrizEDTA®				
EPIKLEAN® Ear Cleanser							Denatured Alcohol, Salicylic Acid
KLEAROTIC Ear Cleanser						Squalane	

¹ Koch, S.N. (2012). *Canine and Feline Dermatology Drug Handbook*. Ames: Wiley-Blackwell.
² Finnegan, S, Percival, SL. EDTA: An Antimicrobial and Antibiofilm Agent for Use in Wound Care. *Advances in Wound Care* 2015; Jul 1 4(7); 415-421.
³ Reiter, L., et al (2009). Characterization and quantification of ceramides in the nonlesional skin of canine patients with atopic dermatitis compared with controls. *Veterinary Dermatology*, 20(4), 260-266.
⁴ Mesman, Mollie, et al. Residual antibacterial activity of canine hair treated with topical antimicrobial sprays against *Staphylococcus pseudintermedius* in vitro. *Vet Dermatology* 2016, 27, 261-e61.



Itching Isn't Everything

New therapeutic advancements help control your patient's pruritus, but the underlying disease and risk of pyoderma flares still exist. Dechra's topical therapy products should be a central part of addressing atopic dermatitis and pyoderma. Daily topical therapy helps remove allergens, support the management of infection and pruritus, and repair the skin barrier for both acutely and chronically affected patients. Dechra makes it easy to implement a multimodal management protocol.

Multi-Modal Management: Benefits & Frequency



- * Shampoo frequency depends on severity and chronicity of infection;
Acute and Severe: every other day
Acute and Mild: once or twice weekly
Chronic: weekly to every other week
- ** Daily mousse, spray and wipe therapy achieves the best results.



Dermatology Product Reviews



TrizCHLOR® 4

In one study the investigator concluded that in select cases chlorhexidine may be used as sole therapy to resolve cases of superficial pyodermas, possibly eliminating the need for oral antibiotics.¹



MALACETIC®

Ceruminolytic, keratolytic, keratoplastic, and astringent actions.³



MICONAHEX+Triz® & TrizCHLOR® 4 Spray

MiconHex+Triz® and TrizCHLOR® 4 Sprays have proven residual activity up to 10 days.²



TrizEDTA®

Tris-EDTA is an antibiofilm agent and has antibacterial activity.^{4, 5}

TrizEDTA® can have a significant impact on the susceptibility of biofilm-embedded P. aeruginosa to certain antimicrobials.⁶

Tris-EDTA enhances significantly both the bactericidal and the inhibitory effects of marbofloxacin and gentamicin against multidrug-resistant P. aeruginosa isolates.⁷

Ear cleaners with activity against Malassezia (TrizULTRA+Keto®) may help to reduce the unnecessary use of antibiotic-containing polypharmaceutical ear medications.⁸

¹ Loeffler et al. Comparison of a chlorhexidine and benzoyl peroxide shampoo as sole treatment in canine superficial pyodermas. Veterinary Record 2011; 69:249.
² Mesman, Mollie, et al. Residual antibacterial activity of canine hair treated with topical antimicrobial sprays against Staphylococcus pseudintermedius in vitro. Vet Dermatology 2016; 27: 261-e61.
³ Susceptibility of Selected Otitis Externa Pathogens to Individual and Mixtures of Acetic and Boric Acids. Benson CE - 4th Proceedings of AAVD/ACVD meeting, 1998. Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania.
⁴ Koch, S.N. (2012). Canine and Feline Dermatology Drug Handbook. Ames: Wiley-Blackwell
⁵ Finnegan, S, Percival, SL. EDTA: An Antimicrobial and Antibiofilm Agent for Use in Wound Care. Advances in Wound Care 2015; Jul 1 4(7); 415-421.
⁶ Pye, C, et al. Evaluation of the impact of tromethamine edetate disodium dihydrate on antimicrobial susceptibility of Pseudomonas aeruginosa in biofilm in vitro. Vet Dermatology 2014; 25: 120-e34.
⁷ Buckley, L, et al. Tris-EDTA significantly enhances antibiotic efficacy against multidrug-resistant Pseudomonas aeruginosa in vitro. Vet Dermatology 2013; 24: 519-e122.
⁸ Mason, Carly, et al. Study to assess in vitro antimicrobial activity of nine ear cleaners against 50 Malassezia pachydermatis isolates. Vet Dermatology 2013; 24: 362-e81.

WHY DECHRA DERMATOLOGY?



✓ DEDICATED SALES TEAM

focused on technically training clinic staff
on dermatology issues and products

✓ DEDICATED TECHNICAL SERVICE

veterinarians and technicians to support
case management and pharmacovigilance

✓ ORDER BY THE BOTTLE, not the case

✓ EASY RETURNS/SATISFACTION GUARANTEE

✓ INVESTMENT INTO EDUCATION

CE dinner meetings, Lunch & Learns,
Dechra Academy, VetFolio, Conferences

✓ INNOVATION

to bring new clinically necessary
products and solutions to the industry

✓ PREMIUM, HIGH-QUALITY FORMULATIONS

to support clinic and patient needs

✓ COMPLIMENTARY CLIENT EDUCATION

tools such as brochures and videos

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