

Content:

'Skin Aid' focuses on skin protection by showing prototype formulations for topical barrier creams, hydration and burn sprays

Barrier creams

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The skin as the outermost layer of the human body provides a protective barrier against external influences, preventing mechanical, chemical or thermal effects and penetration of microorganisms.

A damaged skin barrier leads to the loss of protective functions. It can be the source of changes of the appearance and finally skin diseases.

Silicon-based topical forms have shown to be effective in improving skin condition and protecting it against breakdown.

Barrier creams

Topical formulations designed to place a physical barrier between the skin and irritative substances are commonly referred to as barrier creams or skin protective creams. The formulations can be designed to be water repellent, water-soluble or to address special needs. The mechanism can vary by product: The prevention of water loss by providing occlusivity, repair of the barrier by providing moisturisation, hydration or the protection against irritants.

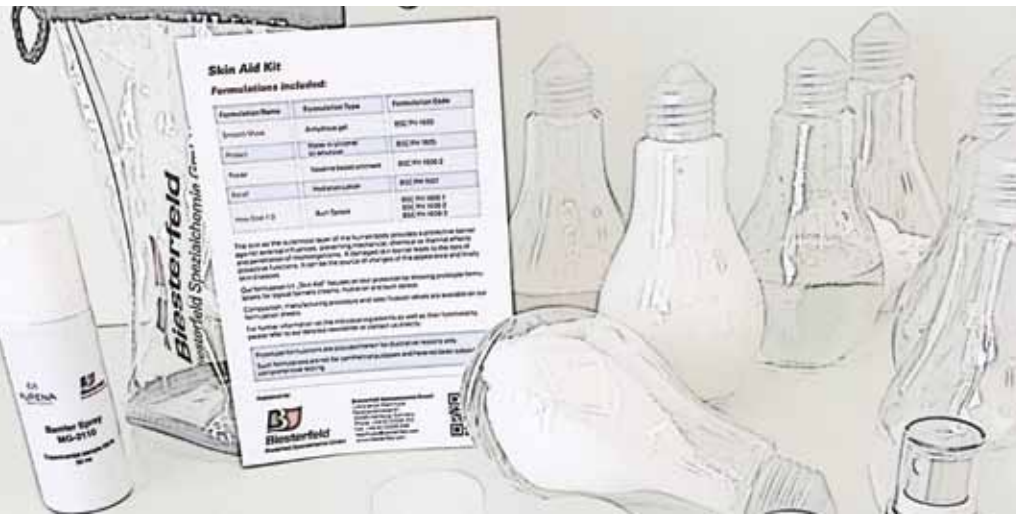
With more than 60 years of health-care market experience in the design of silicone-based systems, Dow Corning is a reliable global supplier of reputable, cost-effective silicone-based topical ingredients manufactured specifically for health-care applications. Providing proven aesthetics and functional film characteristics, such as breathability and substantivity.

Silicone excipients are used in barrier creams for their emollient and skin conditioning effects, they form water resistant yet permeable films, thus allowing to formulate breathable barrier creams.

Glycerine increases the hydration of the stratum corneum thus reducing the effect of dry skin.

Petrolatum has an immediate barrier-repairing effect in delipidized stratum corneum.

The **petroleum jellies** from Aiglon can be used as structuring agents for hydrophobic ointments, as active ingredient to protect, heal and moisturize. Petroleum jelly can reduce the TEWL by more than 98%.



Barrier creams

Special Ingredient: Refined Evening Primrose Oil EP Grade.

Extracted from a 100% pure evening primrose seed and further refined, this particular oil is added to formulations because of its valued health benefits. This oil is commonly used in topical creams marketed to reduce dry skin, and help in the treatment eczema.

Dow Corning® TI - 2021 Speciality Fluid provides moderate volatility, is non-occlusive and reduces the greasy and tacky feel of organic oils.

Dow Corning® TI - 7021 Resin Blend helps to create permeable films, adds wash off resistance and substantivity to formulations.

Dow Corning® TI - 4021 Semi occlusive wax adds wash off resistance to formulations, is a rheology modifier and helps to compatibilize with organic and silicone materials.

Protect BSC-PH 1605 Water in Silicon/Oil emulsion, beathable barrier cream

Trade Name	Ingredient	Supplier	%
Aqua demin.	Aqua		69
Palmera G995 E Glycerin 99,5%	Glycerin	KLK	5
Sodium Chloride	Sodium Chloride		1
Dow Corning® Q7-9120 Fluid 20 cst	Dimethicone	Dow Corning	5
Dow Corning® TI-7012 Solid Resin	Trimethylsiloxysilicate	Dow Corning	2
Dow Corning® TI-2021 AMS Speciality Fluid	Caprylyl Methicone	Dow Corning	7
Dow Corning® TI-6021 W/O Formulation Aid	PEG-10 Dimethicone	Dow Corning	5
Dow Corning® TI-4021 Semi-Occlusive Wax	C30-45 Alkyldimethylsilyl Polypropylsilsesquioxane	Dow Corning	2
Refined Evening Primrose Oil EP Grade	Oenothera Biennis (Evening Primrose) Oil	Sophim	3
Euxyl PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	Schülke & Mayr	1
			100

Repair BSC-PH 1606-2 Vaseline based ointment, barrier cream

Trade Name	Ingredient	Supplier	%
Vaseline Codex Tulle	Paraffin, Cera microcristallina, Paraffinum liquidum	Aiglon SA	73
Dow Corning® Q7-9120 Fluid 20 cst	Dimethicone	Dow Corning	20
Dow Corning® TI-4021 Semi-Occlusive Wax	C30-45 Alkyldimethylsilyl Polypropylsilsesquioxane	Dow Corning	2
Refined Evening Primrose Oil EP Grade	Oenothera Biennis (Evening Primrose) Oil	Sophim	5
			100

Hydration Lotion

Relief Protective hydration lotion. Light lotion designed to support the skin by moisturisation. It provides a smooth skin feeling in dry areas.

Special Ingredients:

Sodium Hyaluronate. Hyaluronic acid is part of the extracellular matrix where its main feature is of hygroscopic nature. In topical formulations, it mostly supports the skin by giving it a more firm and bright appearance and by replenishing it with moisture.

Allantoin is an active in the group of dermatics and keratolytic agents. Allantoin helps in the acceleration of cell-organisation and regeneration, it helps moisturisation and skin smoothing.

The wound healing mechanism induced by allantoin occurs via the regulation of inflammatory response and stimulus to fibroblastic proliferation and extracellular matrix synthesis.

D-Panthenol acts like a moisturizer, improving stratum corneum hydration, reducing transepidermal water loss and maintaining skin softness and elasticity. It is effective in the management of inflammation.

Anhydrous gel

Two anhydrous gel formulations with the purpose of providing a smooth lubrication.

Smooth Move is intended to provide soothing antifriction for feet thus helping to prevent blisters. Smooth Move gel was developed in order to reduce friction of skin areas. Its viscosity can easily be adjusted in order to create a sprayable version.

Relief BSC-PH 1607

Trade Name	Ingredient	Supplier	%
Aqua demin.	Aqua		74,84
Kelcogel CG-LA	Gellan Gum	Kelco	0,09
Kelcogel CG-HA	Gellan Gum	Kelco	0,06
Palmera G995 E Glycerin 99,5%	Glycerin	KLK	2,00
Sodium Benzoat BP/USP	Sodium Benzoate	Biesterfeld	0,2
Kaliumsorbit Granular	Potassium Sorbate	Biesterfeld	0,2
Propylene Glycol	Propylene Glycol	Various	5,00
D-Panthenol 75 w	Panthenol	Biesterfeld	1,35
Sallantoin	Allantoin	Salicilates & Chemicals	0,25
Dow Corning®Q7-9120 Fluid 20 cst	Dimethicone	Dow Corning	1
Inchol	Plukenetia Volubilis Seed Oil	Aiglon SA	3
Sorbilene S / EP	Polysorbate 60	Lamberti	0,6
Lanette N	Ceteryl Alcohol & Sodium Ceteryl Sulfate	BASF	1,25
HA Aquajuve ME	Sodium Hyaluronate	Joyvo	0,01
Aqua demin.	Aqua		10,00
Citric Acid Sol. 10%	Citric acid	Merk	0,15
			100

Inchol®: Sacha Inchi- Plukenetia Volubilis Seed Oil Extra Virgin

Ecocert certified Sacha Inchi Oil Contains Omega 3,6 and 9 as well as Vitamin E. It helps in protecting the skin, by preserving the lipid equilibrium. Suitable for treatment of sensitive, dry and atopic skin.

CP Kelco is a leading manufacturer of nature-based rheology modifiers, gelling agents and functional additives.

BSC-PH 1503

Trade Name	Ingredient	Supplier	%
Dow Corning TI-3021 Silicone Elastomer Blend	Dimethicone / Dimethiconol crosspolymer	Dow Corning	82,5
D-Panthenol 75W	Panthenol; Aqua	Biesterfeld Spezialchemie	2,5
Dow Corning TI-1050 Fluid 1,5 cst	Dimethicone	Dow Corning	15
			100

BSC-PH 1602

Trade Name	Ingredient	Supplier	%
Dow Corning® TI-1050 Fluid 5 cst	Dimethicone	Dow Corning	45,00
Dow Corning® TI-1050 Fluid 30000 cst	Dimethicone	Dow Corning	20,00
Dow Corning® TI-3011 Gum Blend	Dimethicone and Dimethiconol	Dow Corning	35,00
			100

Special Ingredient:

Dow Corning® TI- 3011 Gum Blend is used as structure provider, building a long lasting and smooth film. Thereby protecting the barrier function of the skin.

Burn Sprays

How Cool. Burn Sprays are directly applied to the wound after the skin has been damaged. Spray application of creams or ointments for the treatment of burn wounds have been proven to be a relatively quick and painless way of application. Our basic formulations ‚How Cool‘ 1-2 may treat wounds of minor burnes with its cooling and pain reliving effects. Different gelling systems were applied to showcase the hydrocolloid capabilities.

Kelcogel CG LA (gellan gum) and Xantural 180 (xanthan gum) are added to the formulation for structure providing purposes. The formulation needs to be sprayable and once applied have film forming characteristics. pH control and buffer effects are ensured by adding Genu Pectin USP-L. Moreover, pectin helps to generate a matrix-like structure with its film forming properties.

BSC-PH 1608-1, 1608-2

Trade Name	Ingredient	Supplier	How Cool 1 %	How Cool 2 %
Deionised Water	Aqua		88,90	88,700
Trisodium Citrate Dihydrate	Sodium Citrate	Merck	0,10	0,100
Kelcogel CG LA	Gellan Gum	CP Kelco	0,10	0,100
Xantural 180	Xanthan Gum	CP Kelco	0,05	0,055
Genu Pectin USP-L	Pectin	CP Kelco		0,300
Calcium chloride anhydrous	Calcium Chloride	Merck	0,10	0,100
Potassium Sorbate	Potassium Sorbate	Biesterfeld	0,20	0,200
Sodium Benzoate Granulat/Powder	Sodium Benzoate	Biesterfeld	0,20	0,200
Sallitoin	Allantoin	Salicylates	0,25	0,255
1,2-Propyleneglykol	Propylene Glycol	BASF	5,00	5,000
D-Panthenol 75W	Panthenol; Aqua	Biesterfeld	1,35	1,355
Dow Corning TI-2011 SPE Specialty Fluid	PEG-12 Dimethicone	Dow Corning	1,00	1,000
Ethanol denat.	Alcohol Denat.	diverse	2,50	2,500
Citric Acid (sol. 20%)	Aqua; Citric Acid	diverse	0,25	0,150
			100	100

For detailed references and further information on the ingredients and

formulations please feel free to contact us.

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