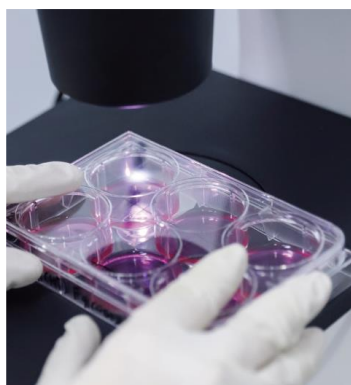




**NATURAL
ANTI-
MICROBIAL**






















**Towards preservative
free formulations!**



Preservatives free Anti-Microbial

Enabling preservative-free formulation that provide consumer a safer product.

PRODUCT LIST

| Veg. Origin | China INCI | Trade Name | INCI | Application Guide | | | | | | Function | Physical Form |
|--|---|----------------------------|--|-------------------|----------------|----------------|-------------|-----------|---------|--|---------------------------|
| | | | | SUN CARE | BODY SKIN CARE | BABY SKIN CARE | FACIAL CARE | HAIR CARE | MAKE UP | | |
|  Vegetables origin |  CHINA INCI approved | | | | | | | | | | |
| Anti-Microbial Booster | | | | | | | | | | | |
|  |  | Reflez AM 8 | Glyceryl Caprylate | ☒ | | | ☒ | ☒ | | An anti-microbial booster which also acts as a co-emulsifier. It work against gram positive, gram negative, yeast and mould | Semi solid |
|  |  | Reflez AM 11 | Glyceryl Undecylenate | ☒ | | | ☒ | ☒ | | Emollient that possesses anti-bacterial properties | Liquid |
|  |  | Reflez AM 12 | Glyceryl Laurate | ☒ | | | ☒ | ☒ | | An anti-microbial booster which is suitable to use against gram positive and gram negative bacteria. It is has a refatening property. | Solid |
|  |  | Reflez AM 28 | Propylene Glycol Caprylate | ☒ | | | ☒ | ☒ | | A natural antibacterial accelerator that is also a good emollient and has moisturizing properties. | Liquid |
| Natural Preservative Package | | | | | | | | | | | |
|  |  | Reflez AM 81 | Glyceryl Caprylate (and) Glyceryl Undecylenate (and) Caprylyl Glycol | ☒ | | | ☒ | ☒ | | A natural self preserving anti-microbial agent that exhibits skin conditioning properties. Ideal for a 'preservative free' claim formulations | Liquid; Dosage: 0.5%-0.6% |
|  |  | NatureGuard CGE 613 | Caprylhydroxamic Acid, Glyceryl Caprylate, Ethylhexylglycerin, 1,2-Hexanediol | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | Nature Guard AHEG is an effective stand-alone system that have a broad anti-microbial spectrum and have a good inhibitory effect on bacteria, yeast, and mold. It can be used in water reagent, W/O, O/W emulsion systems. It has good water solubility. It can be used to make transparent products without solubilizing agents. Applicable pH: 4-8. It is recommended to add to the formulation below 60°C. | Liquid; Dosage: 0.5%-0.6% |
|  |  | NatureGuard EVH 612 | Paeonia Suffruticosa Root Bark Extract, Eugenia Caryophyllus (Clove) Bud Extract, Chamaecyparis Obtusa Leaf Extract, Illicium Verum (Anise) Fruit Extract, Cinnamomum Cassia Bark Extract, Glycine Max (Soybean) Seed Extract, Ethylhexylglycerin, Butylene Glycol | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | This natural anti-microbial complex has a reasonable proportion and has a good antibacterial effect on bacteria and fungi. It is also non-toxic and non-sensitizing to the skin, and less irritation to the eyes under normal use concentration. It can be used as water reagent, W/O, O/W emulsion systems. It has good water-solubility and is widely used in a variety of transparent formulations. It has a applicable pH between 5.5-6.5. | Liquid; Dosage: 0.6%-1.2% |
|  |  | NatureGuard EVL 611 | Citrus Limon Extract, Cinnamomum Cassia Bark Extract, Glycine Max (Soybean) Seed Extract, Butylene Glycol | | | | ☒ | ☒ | | This natural anti-microbial complex has a broad antimicrobial spectrum and has a good inhibitory effect on bacteria and fungi. The pure product is relatively mild, has no obvious irritation on skin contact, is non-toxic and non-sensitizing to the body, and has stress irritation to the eyes under normal use concentration. It is suitable for washing surface-active systems, and it works best when used in formulations with a pH level between 4.5 and 5.5. | Liquid; Dosage: 0.5%-1.0% |
| Low Carbon Footprint Preservative | | | | | | | | | | | |
|  | | Feelz S 9010 | Phenoxyethanol (and) Ethylhexylglycerin | ☒ | | | | ☒ | ☒ | This product is designed for lower carbon emission trend different from other supplier, our Ethylhexylglycerin is produced using enzymatic technique where less heating and energy consumption. It can be used in water reagent, W/O, O/W emulsion systems. Applicable pH: 4-10. | Liquid; Dosage: 0.5%-1.0% |



Recommended
Dosage : 0.5-1.0%

pH Range: 4-6



PRODUCT BRIEF

Combining the natural extracts, this product gives broad anti-microbial spectrum and good inhibitory effect on bacteria and fungi. Unlike other extracts, these combination has high stability and long-term anti-microbial effect.

Beside being standalone, it can function well with approved preservatives (at reduced dosage) such as hydroxamic acid antimicrobial agents, para hydroxy antimicrobial agents, polyol antimicrobial agents.

INCI

CITRUS LIMON FRUIT EXTRACT, CINNAMOMUM CASSIA BARK EXTRACT, GLYCINE MAX (SOYBEAN) SEED EXTRACT, BUTYLENE GLYCOL

NatureGuard EVL 611



GLYCINE MAX (SOYBEAN)
SEED EXTRACT



CINNAMOMUM CASSIA
BARK EXTRACT



CITRUS LIMON (LEMON)
FRUIT EXTRACT

PRODUCT FEATURES

- 100% natural
- Broad anti-microbial spectrum
- Good compatibility with other preservatives (if necessary)
- Removing Mite
- Reduce Acne

APPLICATION

- Rinse-off Personal Care Products
- Household Hygiene Products





Recommended
Dosage : 0.6-1.2%

pH Range: 4-7



PRODUCT BRIEF

Cinnamon has been used in traditional medicine around the world for thousands of years. Combining with other natural extracts, this product gives broad anti-microbial spectrum and good inhibitory effect on bacteria and fungi. Its light cinnamon aroma make your products feel “truly natural” and refreshing.

INCI

PAEONIA SUFFRUTICOSA ROOT BARK EXTRACT, EUGENIA CARYOPHYLLUS (CLOVE) BUD EXTRACT, CHAMAECYPARIS OBTUSA LEAF EXTRACT, ILLICIMUM VERUM (ANISE) FRUIT EXTRACT, CINNAMOMUM CASSIA BARK EXTRACT, GLYCINE MAX (SOYBEAN) SEED EXTRACT, ETHYLHEXYLGLYCERIN, BUTYLENE GLYCOL

NatureGuard EVH 612



PAEONIA SUFFRUITROOT
BARK EXTRACT



EUGENIA CARYOPHYLLUS (CLOVE)
BUD EXTRACT



CINNAMOMUM CASSIA
BARK EXTRACT



ILLICIMUM VERUM (ANISE)
FRUIT EXTRACT



CHAMAEPYPARIS OBTUSA
LEAF EXTRACT



GLYCINE MAX (SOYBEAN)
SEED EXTRACT

PRODUCT FEATURES

- 100% natural
- Broad anti-microbial spectrum
- Water Soluble; can used in transparent products
- Good compatibility with other preservatives (if necessary)

APPLICATION

- Leave-On Personal Care Products





Recommended
Dosage : 0.5-0.6%

pH Range: 4-8



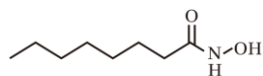
PRODUCT BRIEF

Combining Caprylhydroxamic acid and Glyceryl Caprylate to form the main antimicrobial active ingredients of this product, it has a broad antimicrobial spectrum and have a good inhibitory effect on bacteria, yeast, and mold. On top of that Ethylhexylglycerine changes the permeability of the cell membrane so that the antimicrobial component can efficiently penetrate the cell membrane and enter the cell body to exert its antimicrobial effect. With the synergistic 1,2-hexanediol, it increases the solubility of Caprylhydroxamic acid in the system and had a moisturizing effect at the same time.

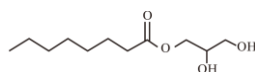
INCI

CAPRYLHYDROXAMIC ACID, GLYCERYL CAPRYLATE, ETHYLHEXYLGLYCERIN, 1,2-HEXANEDIOL

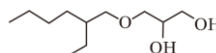
NatureGuard CGE 613



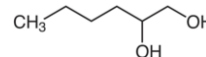
CAPRYLHYDROXAMIC
ACID



GLYCERYL CAPRYLATE



ETHYLHEXYLGLYCERIN



1,2-HEXANEDIOL

PRODUCT FEATURES

- An effective as a stand-alone system
- Broad antimicrobial spectrum and have a good inhibitory effect on bacteria, yeast, and mold
- Good water solubility. It can be used to make transparent products without solubilizing agents.

APPLICATION

- Water reagent, W/O, O/W emulsion systems.





Recommended
Dosage : 0.5-1.0%

pH Range: 4-10

PRODUCT BRIEF

90% of Phenoxyethanol and 10% of Ethylhexylglycerin combination are popular choice of many formulators. Common name know as 9010.

Our product is stand-out from the common grade because aligned to the ESG trend. The enzymatic derived Ethylhexylglycerin has lower carbon footprint. This help ESG practicing company on step closer to the lower carbon tax rate.

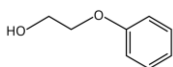
For the same effectiveness, why not get your company also contributing to the sustainability.

INCI

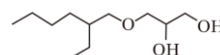
PHENOXYETHANOL, ETHYLHEXYLGLYCERIN



Feelz S 9010



PHENOXYETHANOL



ETHYLHEXYLGLYCERIN

PRODUCT FEATURES

- An effective as a stand-alone system
- Broad antimicrobial spectrum and have a good inhibitory effect on bacteria, yeast, and mold
- High stability and can have a long-term antimicrobial effect.

APPLICATION

- Water reagent, W/O, O/W emulsion systems.
- It is recommended to add to the formulation below 50°C.

