

MG-60

A Natural Derived Oligo-Saccharide with Unique Texture

Foam booster with rich texture

Repairs damaged hair and provides shine

Prevents skin roughness and redness



A starch-derived cosmetic ingredient with rich foaming and texture properties that protects skin and hair from damage

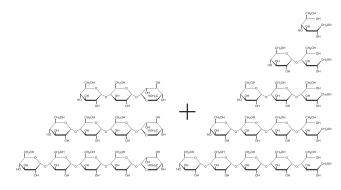
MG-60 is a functional oligo-saccharide derived from starch, mainly composed of maltooligosyl glucoside. Maltooligosyl glucoside is composed of a trehalose molecule binding 1-3 glucose molecules. MG-60 is a non-reducing saccharide with a unique "moist but non-sticky" texture, and has excellent thermal and chemical stability without participating in the Maillard reaction—making it suitable for numerous types of formulations.

MG-60 enhances luster and combability by coating damaged hair. In addition, MG-60 protects skin from irritation and reduces skin roughness. MG-60 adds to the functionality of a product by giving it a rich, long-lasting foam, creates a desirable texture in a variety of applications, and enhances the smoothness of the product on the skin. It is versatile in many product formulations as a damage protectant and texture improver.

- Reduces skin roughness
- Enhances foaming quality
- Homogenizes emulsified particles
- Improves texture
- Protects hair from environmental damage
- Improves luster
- Low cariogenicity for oral care

Structural formula of MG-60

MG-60 is a starch-derived carbohydrate liquid, comprising maltooligosyl glucoside and hydrogenated starch hydrolysate.



Maltooligosyl glucoside

Hydrogenated starch hydrolysate (sugar alcohol)

BENEFIT 1

Produces soft and bouncy foam

Adding MG-60 to a skin cleansing agent maintained the foam shape, resulting in a soft and bouncy foam.

Skin cleansing agent samples with and without MG-60 were diluted 10 times with distilled water. Each diluted sample was beaten in a blender for 1 min to make a foam. Then the same volume of each foam samples was funneled onto the mesh. The photos demonstrate the foam 3 minutes after being beaten in a blender.

FOAM COMPARISON





0% MG-60

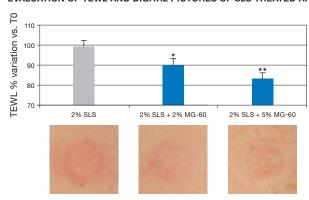
5% MG-60

BENEFIT 2

Prevents skin roughness

MG-60 significantly reduced transepidermal water loss (TEWL) and skin redness caused by sodium lauryl sulfate (SLS).

EVALUATION OF TEWL AND DIGITAL PICTURES OF SLS TREATED AREAS



2% SLS solution without or with 2%, 5% MG-60 was patched on the backs of 20 males and females for 24 hours. 1 hour after the patches were removed, TEWL was measured and skin surface images were photographed.

BENEFIT 3

Improves hair luster

MG-60 treatment increased the contrast glossiness of damaged hair.

MEASUREMENT OF LUSTER

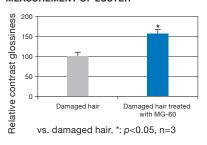


PHOTO UNDER DAYLIGHT



vs. 2% SLS, *: p<0.05,

**: p<0.001

Damaged hair Damaged hair treated with MG-60

Bleached/damaged hair was placed in a solution containing 5% MG-60 for 10 minutes, then washed and dried. Polarized images were taken with a digital microscope. The specular and diffuse reflective component values were then calculated from the images. Hair luster was evaluated by contrast gloss, which is the ratio of specular and diffuse reflections.

BENEFIT 4

Restores damaged hair

MG-60 has a "protective-coating" property that leads to the restoration of damaged hair.

ELECTRON MICROSCOPIC IMAGE OF HAIR





Damaged hair

Damaged hair treated with MG-60

Bleached/damaged hair was placed in a solution containing 50% MG-60 for 20 minutes, then washed and dried. Images of the cuticles were evaluated by a scanning electron microscope (x700).

APPLICATIONS

Skin Care
Body Care
Hair Care
Oral Care

PRODUCT FORMS

Lotions, Toners, Milk Lotions, Creams, Gels, Serums/Essences, Sheet Masks, Wipes, Face Cleansers, Shampoos, Conditioners, Body Shampoos, Soap Bars, Mouthwashes, Toothpastes

SUGGESTED USAGE LEVEL

Skin Care	1.0–10.0%
Body Care	1.0-5.0%
Hair Care	1.0–10.0%
Oral Care	1.0–5.0%

INFORMATION

INCI NAME

Maltooligosyl Glucoside Hydrogenated Starch Hydrolysate

DESCRIPTION

Colorless and clear viscous solution, and odorless

STORAGE

Store at room temperature. Avoid direct sunlight, and high temperature and humidity.

EXPIRATION

Two (2) years from the production date

PACKAGE

Tin-free steel can (net 24 kg)

SAFETY

Data acquired





Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard

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MG-60 is manufactured by Nagase Viita Co., Ltd. in Japan

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