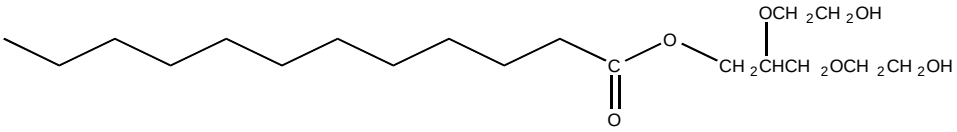
Masurf® G-2C



Glycereth-2 Cocoate

Overview

MASURF G-2C is a 100% active Glycereth-2 Cocoate. MASURF G-2C is uniquely non-irritating, readily biodegradable and eco-tox friendly. With its unique thickening, foam boosting and stabilizing, solubilizing and emollient properties, G-2C is a superior product for use in wide range of products including: shampoos, mild skin cleaners, soap and shave gels, skin lotions and bath oils.

With over 35 years Specialty Chemicals manufacturing experience and using the highest quality raw materials, MASURF G-2C is characteristically low color, low odor and reliably consistent batch to batch for the Personal Care Market.

MASURF G-2C is based on the renewable vegetable components found in coconut oil, making it a uniquely natural compliment for use in Personal Care products as a multi-functional replacement for Cocamide DEA while being diethanolamine and nitrosamine free. In other applications, use MASURF G-2C as a nonionic emulsifier, foam booster and stabilizer, and convenient and efficient thickener. **Also available in this product series: MASURF G-7C (Glycereth-7 Cocoate) and MASURF G-17C (Glycereth-17 Cocoate).**

INCI Name: Glycereth-2 Cocoate
CAS#: 68201-46-7

Typical Properties

Water solubility	Soluble in aqueous surfactant systems
Physical form	Viscous liquid
Color (APHA)	150 Maximum
Actives	100%
Hydroxyl Value (mgKOH/g)	450-490
Saponification Value (mgKOH/g)	108-124
HLB	11
Viscosity (25°C)	500cps Maximum
pH (5% aq.)	7.0±1.0
Specific gravity (25°C)	1.08±0.04
Flash point	>100°C/212°F (PMCC)

Handling Information

Refer to the Material Safety Data Sheet (MSDS) available from Mason Chemical Company for information on the safe use, handling and disposal of this product.

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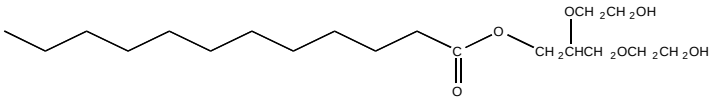

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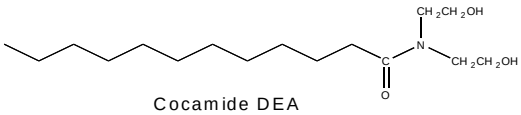
As a replacement for Cocamide DEA, MASURF G-2C is an ethoxylated fatty acid monoglyceride based on the renewable vegetable components found in coconut oil. As a nonionic surfactant, G-2C is compatible with anionic, amphoteric, cationic and nonionic surfactants, is not affected by hard water and is stable in aqueous solutions in the pH range of 4-8. Derived from renewable resource coconut oil monoglycerides, MASURF G-2C is readily biodegradable (Sturm), exhibits low aquatic toxicology (LC50 >10mg/L, 96 hrs), is non-irritating, both dermal (Draize, Rabbit, 4hrs.) and ocular (Draize, Rabbit, 4hrs.), and non-sensitizing (CCET, Guinea Pigs). Based on naturally derived glycerine, MASURF G-2C is an excellent emollient and moisturizer when used in Skin Care formulations.



Cocamide DEA

Use MASURF G-2C as a superior thickening agent in both alkyl ether sulfate (AES) and non-AES formulations. When incorporating G-2C into AES formulations, foam is not limited as with Cocamide DEA, and viscosity builds quickly without salt. In non-AES formulations, such as extra-mild skin cleaners, MASURF G-2C is superior to nonionic polymeric thickeners, such as PEG-150 Distearate or PEG-150 Pentaerythrityl Tetrastearate, through ease of use and non-tacky skin feel.

In other applications, MASURF G-2C is an effective emulsifier in O/W systems such as silicones and paraffinic oils, with an HLB of 11. MASURF G-2C, when formulated into conditioning shampoos, is a very effective thickening and stabilizing agent, as the formulation below illustrates:

Clear Conditioning Shampoo

Ingredients:	**Wt.%**
Water	to 100.0
Sodium laureth-2 sulfate (28%)	10.0
Masurf Ultra CG	3.0
Masurf G-2C	2.0
Maquat BTMC-85	0.5
Citric acid	for pH 6-6.5
Fragrance	q.s.
Extracts/Oils	q.s.
Preservative	q.s.

Procedure:

- Charge materials into water with agitation in order listed.
- Adjust pH to 6-6.5 with citric acid.
- Add Fragrance, Extracts/Oils such as Aloe Vera, Chamomile and Jojoba, and Preservative.
- Adjust viscosity with sodium chloride.

Safety/Toxicology/Ecotoxicology/Regulatory Information: Masurf G-2C is a non-sensitizer (CCET Method), non-mutagenic (OECD 471, TA98, TA100, TA1535, TA1537, TA1538), non-toxic: LD50 >2000 mg/kg (92/69/ECC), non-irritating for both skin and eye (93/21/CEE, OECD 404, 405), is biodegradable: >60% in 28 days (OECD 301B), and exhibits low Ecotoxicity: Fish LC_{50}(96 hours) >10mg/L (OECD 203).
Masurf G-2C complies with the requirements of the following chemical inventories: US (TSCA, FIFRA), Canada (DSL), Australia (AICS), Korea (ECL).
See Material Safety Data Sheet for additional information.