



A fermentation-produced, TSCA-certified biosurfactant that replaces legacy surfactants with better performance

# Carpet Shampoo Formulation

Featuring Amphi® M Sophorolipid

Locus Ingredients' carpet shampoo offers formulators a more sustainable cleaning formulation that outperforms leading brands. It features Amphi® M, a naturally occurring blend of nonionic and anionic sophorolipids—biosurfactants from the glycolipid class with robust performance and sustainability.

Modern carpets are manufactured with blends of complex materials and fibers that require sophisticated cleaning solutions to properly remove dirt and soils. Typical carpet cleaners rely on formulated blends of nonionic and anionic surfactants:

- Nonionic surfactants are used to wet carpet fibers. Many nonionic surfactants are composed of ethoxylates, which can contain residual 1,4-dioxane—a suspected carcinogen that is restricted in multiple states.
- Anionic surfactants are used to emulsify and wash away dirt and soils. Currently, sulfates are among the most used anionic surfactants. These chemicals are suspected of causing skin irritation and sensitization in both humans and pets.

Amphi M is free from ethoxylates and sulfates. In carpet cleaning applications, Amphi M's multifunctionality enables strong wetting of carpet fibers and emulsification of dirt and soils without producing large amounts of hard-to-remove foam.

Amphi M is compatible with other nonionic and anionic surfactants and traditional additives, such as acrylate polymer to adjust viscosity and solvents to assist with complex soil removal. Formulators can find Amphi M on the TSCA inventory under CAS# 1573124-58-9, available for all uses.

Ingredient	%
Water	77.19
Amphi® M	7.28
Sodium Citrate	0.56
Acrylic Polymer	0.19
Sodium Caprylyl Sulfonate	5.56
Disodium Phosphate	0.42
Fragrance	0.56
Stabilizer	0.09
Sodium Hydroxide	0.37
Zinador™ 35	0.83
Chelator	0.46
Isopropyl Alcohol	4.64
Sodium Lauroyl Sarcosinate	1.85
<b>Total</b>	<b>100.00</b>

Formulated by Freelance Formulation

### Procedure

Step	Actions
1	Apply stain
2	Cover stain with carpet cleaner product
3	Scrub with brush 10x
4	Run over with carpet cleaner (downward) 2x

