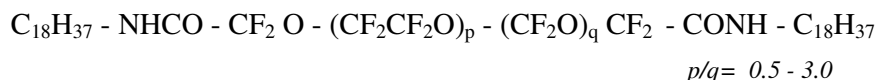


FOMBLIN[®] HC/SA-18

Chemical Structure



Identification

<i>INCI Name:</i>	Polyperfluoroethoxymethoxy Difluoromethyl Distearamide
<i>Other Names:</i>	Perfluoropolyether stearylamine, PFPE amide-18
<i>CAS Number:</i>	220207-10-3
<i>CAS Name:</i>	1-Octadecanamine, reaction products with Et esters of reduced polyimd oxidized tetrafluoroethylene
<i>EINECS Number:</i>	Not applicable (since it is a polymer)

Description and typical properties

Fomblin HC/SA-18 is a pale yellow waxy solid (melting point: 53 °C, molecular weight: 2000, density: 1.4 g/ml at 20 °C), produced by oxidative photopolymerization of tetrafluoroethylene, esterification, and reaction with non-animal origin 1-octadecylamine (Armeen 18D, Akzo Nobel).

Fomblin HC/SA-18 is insoluble in water, ethanol, glycols, glycerin - similarly to other perfluoropolyethers, it is remarkable its dispersability in polyols (eg glycerin, diglycerin, propylen glycol, etc.). Fomblin HC/SA-18 is soluble in acetone, ethylacetate, ethyl ether, isopropanol, and, at temperature higher than its melting point, in most cosmetic oils, as reported hereunder.

<i>Class of oils</i>	<i>T = 25 °C</i>	<i>T = 53°C</i>	<i>Solution cooled to 25 °C</i>
Cetearyl alcohol, Ethylhexyl dodecanol, Dicaprylil ether, Isopropyl isostearate, Glyceryl stearate, Caprylic/capric triglyceride, Cocoglycerides, Neopentyl glycol diheptanoate, Neopentyl glycol diethylhexanoate	Insoluble	Transparent solution	Lipogel
Hexyl laurate, Isopropyl miristate, Octyl octanoate, Dibutyl adipate	Insoluble	Opalescent solution	Lipogel
Dimethicone, Castor oil, Mineral oil, Hydrogenated polyolefin, Glyceryl oleate	Insoluble	Insoluble	-
Mineral oil/monoesters (1:2)	Insoluble	Transparent solution	Lipogel

Toxicity information and safety

See “Fomblin HC/SA-18 – Dossier of toxicity test” and Fomblin HC/SA-18 – Material Safety Data Sheet”

Solvay
Solexis



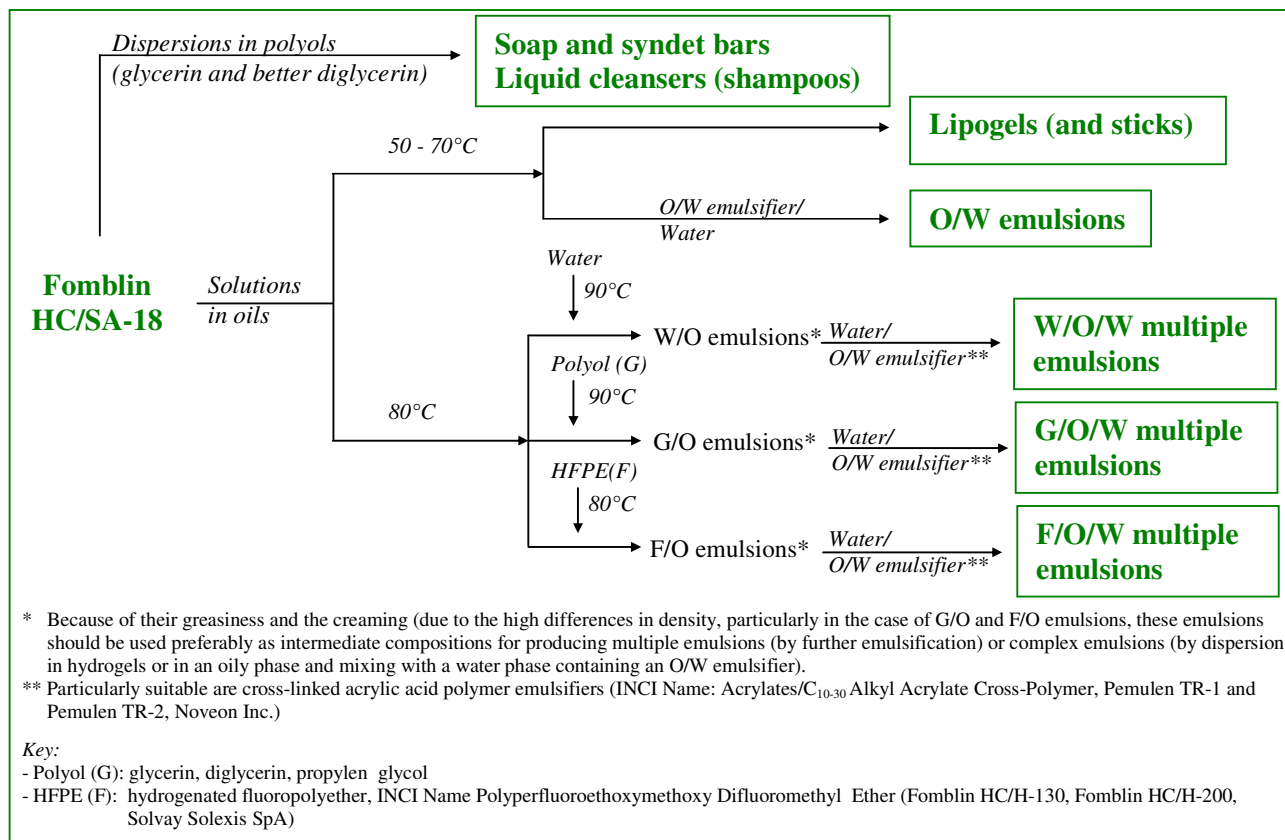
Uses, functionalities and formulating

Fomblin HC/SA-18 retains the performance benefits and sensory attributes associated to perfluoropolyethers, with improved compatibility, substantivity, lubricity and water repellency (combining with some oil repellency).

Combining several benefits and a unique activity as structurant (high temperature emulsifier and viscosity agent), Fomblin HC/SA-18 is the pivot ingredient in various conventional and innovative compositions, including fluid and viscous O/W emulsions, multiple and complex emulsions, lipsticks and other decorative compositions, soaps and syndet bars, liquid cleansers, solutions in polar solvents, etc.

In these formulations, Fomblin HC/SA-18 works as:

- Skin (and hair) protectant, particularly against water soluble irritants,
- Skin (and hair) conditioner,
- Sensory modifier, to reduce stickiness,
- Surface modifier, to impart water (and oil) repellency to substrates (e.g. pigments and mineral powders),
- Component of lipogels, O/W emulsions and three phase emulsions, to increase water (and oil) repellency,
- High temperature primary emulsifier, effective for W/O, G/O, F/O and other anhydrous emulsions, to be used as intermediate compositions for producing multiple and complex emulsions,
- Viscosity agent, for aqueous and non-aqueous systems,
- Superfatting agent in syndet bars and other cleansing preparations,
- Alternative to natural and synthetic traditional waxes, at lower concentration (0.1-1.0 %).



Some applications of this product are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by our own recommendations, which may among other concern food/feed, water treatment, medical devices or pharmaceuticals, personal care, etc. The buyer and the eventual user, in their sole and entire liability, shall comply with the laws and the regulations applicable to our products, their use and/or to the activity of buyer or the eventual user, and shall respect all applicable standards, recommendations, orders of any relevant authority, as well as all existing patents and intellectual properties rights. The buyer and the eventual user must independently determine the suitability of this product for any particular purpose and its manner of use. Please contact us for further information on grades developed for a specific end-use.

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