Anionic

Sulfate, sulfonate, and phosphate esters

<u>Anionic</u> surfactants contain anionic functional groups at their head, such as <u>sulfate</u>, <u>sulfonate</u>, <u>phosphate</u>, and <u>carboxylates</u>. Prominent alkyl sulfates include <u>ammonium lauryl sulfate</u>, <u>sodium lauryl sulfate</u> (sodium dodecyl sulfate, SLS, or SDS), and the related alkylether sulfates <u>sodium laureth sulfate</u> (sodium lauryl ether sulfate or SLES), and <u>sodium myreth</u> sulfate.

Others include:

- Docusate (dioctyl sodium sulfosuccinate)
- Perfluorooctanesulfonate (PFOS)
- Perfluorobutanesulfonate
- Alkyl-aryl ether phosphates
- Alkyl ether phosphates

Carboxylates

These are the most common surfactants and comprise the carboxylate salts (soaps), such as <u>sodium stearate</u>. More specialized species include <u>sodium lauroyl sarcosinate</u> and carboxylate-based fluorosurfactants such as <u>perfluorononanoate</u>, <u>perfluorooctanoate</u> (PFOA or PFO).