



**Manufacturing Process Legend**  
 (a) Manufactured by either ECF or fluorotelomerization  
 (b) Manufactured by ECF  
 (c) Manufactured by fluorotelomerization

**Notes**  
 † N:3 saturated/unsaturated acids subfamily (intermediate transformation product) not shown under this family  
 ‡ Unsaturated derivatives are intermediate transformation products

**PFAS Use Legend**

- (1) Surfactants
- (2) Intermediate environmental transformation product
- (3) Principal raw material for perfluoroalkane sulfonyl-based products including surfactants and surface protection products
- (4) Raw material for surfactants and surface protection products
- (5) Includes some fluoropolymer polymerization aids
- (6) Ski wax, medical applications
- (7) Raw material for fluorotelomer-based surfactants and surface protection products
- (8) High molecular weight polymeric plastics such as PTFE
- (9) A broad class of polymers used largely as lubricants
- (10) Used for surface protection
- (11) Major raw material for perfluoroalkane sulfonyl-based surfactant and surface protection products