

CAS No. 355-46-4 **HS Code:** 38220090

Full Name: Perfluorohexane-1-sulfonic acid (PFHxS)

Trade Name: RM70 (CAS No. 423-50-7), RM75 (3871-99-6), and RM570 (CAS No. 41997-13-1) (PFHxS-related substances produced by Miteni SpA, Italy)

Synonyms: PFHxS; PFHS

Tridecafluorohexane-1-sulfonic acid, Tridecafluorohexane-1-sulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluorohexane-1-sulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluoro-1-hexanesulfonic acid

Uses:

PFHxS, its salts and related substances have unique properties with a high resistance to friction, heat, chemical agents, low surface energy and used as water, grease, oil and soil repellent. It is widely utilized in a variety of consumer goods such as carpets, leather, apparel, textiles, firefighting foam, papermaking, printing inks, sealants, non-stick cookware.

Hazards and Risks to human health and the environment:

PFHxS are very resistant to chemical, thermal and biological degradation due to their strong carbon-fluorine bonds and a resistance to degradation which makes it persist in the environment. PFHxS concentrations are found in biota and human alike and its elimination takes approximately 8 years.

Effects of PFHxS in humans are found to influence on the nervous system, brain development, endocrine system and thyroid hormone.

Reference

- Risk profile on perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds Persistent. Organic Pollutants Review Committee. 2018; UNEP/POPS/POPRC.14/6/Add.1
- Proposal to list perfluorohexane sulfonic acid (CAS No: 355-46-4, PFHxS), its salts and PFHxS-related compounds in Annexes A, B and/or C to the Stockholm Convention on Persistent Organic Pollutants. UNEP/POPS/POPRC.13/4. 2017
- Open Chemistry Database. Perfluorohexanesulfonic Acid. 2005. (https://pubchem.ncbi.nlm.nih.gov/compound Perfluorohexanesufonic_acid#section=Top)





