

❖ 規 格

水處理劑 聚合鐵(PFS) 系列	
名 稱	規 格
比重	1.2 ~ 1.3
鐵含量，%	大於 5.0%
Fe ²⁺ 含量，%	小於 0.5%
PH 值 (1%水溶液)	1.0—2.0
不溶物含量，%	小於 0.3%

❖ 產品特性

聚合鐵 (PFS) 是一種鹼性聚合鐵。其分子式為 $[\text{Fe}_2(\text{OH})_n (\text{SO}_4)_{3-N/2}]_m$ ，其中 $n > 2$ ； $m=f(n)$ 。在水溶液中存在大量的 $[\text{Fe}_2(\text{OH})_3]^{3+}$, $[\text{Fe}(\text{H}_2\text{O})_6]^{3+}$, $[\text{Fe}_3(\text{OH})_3]^{6+}$ 等聚合鐵絡合離子，是一種容易形成膠體和凝聚性能極佳的凝聚劑。其分子具有多核絡合離子的立體聚合結構。在水中能快速水解，產生高效能的 $\text{Fe}[\text{Fe}(\text{OH})_2]_n(3+n)^+$ 多核羥基絡合正離子。在原水的淨化過程中，既有強烈的中和懸浮物體表面電荷的能力，又有懸浮粒子間架起橋樑的作用。

❖ 用 途

可用作污水處理劑 (助凝劑)、多種工業廢水處理劑 (如造紙廢水、印染廢水、屠宰污水、汽車製造廢水、啤酒廠廢水等)、多種工業循環水處理劑 (高爐煤氣洗滌水、熱電廠高壓鍋爐補給水)、城市汙水處理廠和工業廢水生化處理站生化汙泥濃縮脫水處理劑、廢乳化和乳濁液以及含油廢水破乳劑。

❖ 包 裝

液體：槽車。

❖ Specification

Water treatment - Polymer ferric (PFS)	
Items	Specification
Density, g/cm ³ (20°C)	1.2 ~ 1.3
Fe, %	Great than 5.0%
Fe ²⁺ , %	Less than 0.5%
PH(1% water solution)	1.0—2.0
unsoluble substances %	Less than 0.3%

❖ Characteristics

Polymer ferric (PFS) is a complex ferric material. The molecular formula is the $[\text{Fe}_2(\text{OH})_n(\text{SO}_4)_{3-n/2}]_m$, $n > 2$; $m=f(n)$. There are a lot of complex ferrous ion ($[\text{Fe}_2(\text{OH})_3]^{3+}$, $[\text{Fe}(\text{H}_2\text{O})_6]^{3+}$, $[\text{Fe}_3(\text{OH})_3]^{6+}$) in its water solution.

So it is a good agglomerant which have a easy formation flocculate and have a good coacervation. Its chemical structure is a solid network polymer which has a multinuclear complex ion. The easier hydrolysis in water and the highly efficient multinuclear hydroxyl complex negative ion have been produced during hydrolysis. In the process of a water treatment, Polymer ferrous sulfate has a good ability to neutralize surface electric charge of suspended substances, and linking suspended particle.

❖ Uses

1. Water purification agent.
2. Industry waste water treatment (such as the paper making waste water, the printing waste water, the massacre waste water, the automobile manufacturing waste water, the beer factory waste water and so on.),
3. Many kinds of industry circulating water treatment (ex, the blast-furnace gas washing water, the make-up water of the high pressure boiler in the heat and power plant, the industry waste water in biochemical treating factory, the waste emulsifying solution, the opalescent solution and the oil waste water.

❖ Package

Liquid : The tank car