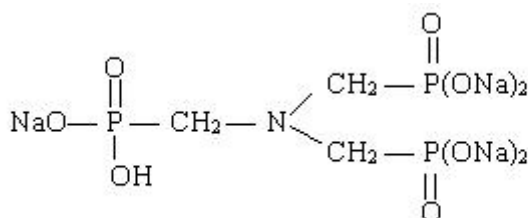


Penta Sodium Salt of Amino Trimethylene Phosphonic Acid (ATMP.Na₅)



| | | | |
|--------------------------|--|-------------------------|-----------|
| CAS No. | 2235-43-0 | EINECS No. | 218-791-8 |
| Molecular Formula | C ₃ H ₇ NO ₉ P ₃ Na ₅ | Molecular Weight | 409 |

Structural Formula



Product Features

ATMP.Na₅ is the sodium salt of ATMP, a scale inhibitor in water treatment system, calcium carbonate CaCO₃ in particular. ATMP.Na₅ applications includes oilfield water treatment, cooling water treatment, boiler water treatment, industrial and institutional cleaners, etc. ATMP.Na₅ is an economic scale inhibitor, has good corrosion inhibition with zinc salt and phosphate. ATMP.Na₅ is also a good chelating agent.

Technical Specification

| Items | Index |
|---|--|
| Appearance | Colorless to light yellow transparent liquid |
| Active content (ATMP), % | 27.8-30.7 |
| Active content (ATMP·Na ₅), % | 38.0-42.0 |
| Chloride (as Cl ⁻), % | 1.0 max |
| PH (1% water solution) | 10.0-11.0 |
| Fe, mg/L | 10 max |
| Density (20°C), g/cm ³ | 1.38-1.48 |




Applications & Usage

ATMP.Na₅ is mostly used with organophosphoric acid, polycarboxylic acid and salt to form all organic water treatment formulation for various circulating cooling water systems with different water quality conditions. Neutralized form and has excellent CaCO₃ scale inhibitor in oilfield applications. Compatible with other additives.




Scale & Corrosion Inhibition Performance

| | | | |
|------------------------------|------------------------------|--|-----------------------------|
| CaCO ₃ inhibition | CaSO ₄ inhibition | CaC ₂ O ₄ inhibition | CaF ₂ inhibition |
| Excellent | Good | Very Good | Excellent |
| Calcium Tolerance | Iron Control | Sequestration | Steel corrosion inhibition |
| Good | Yes | Good | Excellent |

Package & Storage

| ATMP.Na ₅ liquid | | | |
|---|---|--|---|
| 25L Drum | 200L Drum | 1000L IBC | ISO Tank |
|  |  |  |  |
| Storage for ten months in shady room and dry place. | | | |

Hazard & Safety Precaution

| Hazard Information | Safety Precaution |
|---|--|
| Not regulated |    |
| Once contacted with eye and skin, flush with plenty of clean water. | |

Alternative Name / Synonyms

- Pentasodium hydrogen C,C',C''-nirilotris(methylphosphonate)