



ScaleFix MSD

A high-performance metal sulfide dissolver designed to efficiently remove metal sulfide scale without the generation of hydrogen sulfide



ScaleFix MSD is a high-performance metal sulfide dissolver and descaler designed to efficiently remove metal sulfide scale at surface and at low temperatures downhole, with a unique ability to dissolve extremely high amounts of metal sulfide scales. These include iron(II) sulfide (FeS), zinc sulfide (ZnS), and lead(II) sulfide (PbS) without the formation of highly hazardous, corrosive and toxic hydrogen sulfide (H₂S) observed with current chemistry being utilized.

Metal sulfides are an intrinsic source of hydrogen sulfide and greatly reduces the profitability for operations by causing formation damage, hosting bacteria, and fouling piping, tanks, and process equipment.

Applications

- Down-hole scaling issues (at low temp)
- Remediation of midstream pipelines and associated equipment
- Heat exchangers / pipelines
- Onshore / offshore topside processing and production treatments
- Geothermal well scale treatments
- Separators / hydrocyclones / degasser treatments

Features

- High dissolving capacity of FeS
- High rate of dissolution vs competition
- Premium HS&E profile with no generation of H₂S
- Non corrosive

Benefits

- Increase production and revenue
- Non-damaging to formation and cost effective
- Non-damaging to metal surfaces and seals



Technical Specification

| | |
|-------------------|-------------------------|
| Appearance | Clear, amber liquid |
| Specific Gravity | 1.13 - 1.17 |
| Freezing Point | - 12°C / - 54°F |
| Boiling Point | > 100°C / 212°F |
| pH | 8.0 - 10.0 |
| Flash Point | > 100°C / 212°F |
| Shelf Life | 6 months |
| Solubility | Highly soluble in water |
| Thermal Stability | Approx. 130°C / 266°F |
| FeS Solubility | 0.25lb/gal |
| ZnS Solubility | 0.013lb/gal |
| PbS Solubility | 0.33lb/gal |



Corrosion

| Blend | Temperature | | Coupon | Time | Corrosion |
|-------------------|-------------|-------|--------|---------|--------------------------|
| 100% ScaleFix MSD | 40°C | 104°F | 1018CS | 24 hrs | 0.007 lb/ft ² |
| 100% ScaleFix MSD | 40°C | 104°F | J55 | 24 hrs | 0.007 lb/ft ² |
| 100% ScaleFix MSD | 40°C | 104°F | P110 | 24 hrs | 0.005 lb/ft ² |
| 100% ScaleFix MSD | 40°C | 104°F | QT-900 | 24 hrs | 0.008 lb/ft ² |
| 100% ScaleFix MSD | 60°C | 140°F | 1018CS | 16 hrs | 0.036 lb/ft ² |
| 100% ScaleFix MSD | 60°C | 140°F | J55 | 16 hrs | 0.035 lb/ft ² |
| 100% ScaleFix MSD | 60°C | 140°F | P110 | 16 hrs | 0.020 lb/ft ² |
| 100% ScaleFix MSD | 60°C | 140°F | QT-900 | 16 hrs | 0.026 lb/ft ² |
| 100% ScaleFix MSD | 55°C | 131°F | 316SS | 168 hrs | 0.000 lb/ft ² |
| 100% ScaleFix MSD | 55°C | 131°F | A7075 | 168 hrs | 0.004 lb/ft ² |

For temperatures above 60°C, please consult Tendeka technical support