

Enviro-Syn[®] MSD-30[™]

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

Enviro-Syn[®] MSD-30[™] is a high-performance metal sulfide dissolver and descaler designed to efficiently remove metal sulfide scale 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
- 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
- Injection well scale treatments

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	30 kg/m ³
ZnS Solubility	1.5 kg/m ³
PbS Solubility	40 kg/m ³

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

Scale	Total Solubility kg/m ³
FeS	30
ZnS	1.5
PbS	40





Corrosion

Blend	Temperature		Coupon	Time	Corrosion
100% MSD-30	40°C	104°F	1018CS	24 hrs	0.007 lb/ft ²
100% MSD-30	40°C	104°F	J55	24 hrs	0.007 lb/ft ²
100% MSD-30	40°C	104°F	P110	24 hrs	0.005 lb/ft ²
100% MSD-30	40°C	104°F	QT-900	24 hrs	0.008 lb/ft ²
100% MSD-30	60°C	140°F	1018CS	16 hrs	0.036 lb/ft ²
100% MSD-30	60°C	140°F	J55	16 hrs	0.035 lb/ft ²
100% MSD-30	60°C	140°F	P110	16 hrs	0.020 lb/ft ²
100% MSD-30	60°C	140°F	QT-900	16 hrs	0.026 lb/ft ²
100% MSD-30	55°C	131°F	316SS	168 hrs	0.000 lb/ft ²
100 % MSD-30	55°C	131°F	A7075	168 hrs	0.004 lb/ft ²

