Product Bulletin

ASR Tri-ACT 1800

Condensate Corrosion Inhibitor

PRODUCT DESCRIPTION AND APPLICATION

ASR ASR Tri-ACT 1800 is a corrosion inhibitor that contains a blend of low, medium and high volatility amines designed for use in steam and condensate systems. **ASR Tri-ACT 1800** provides effective neutralization of acidic gases, such as CO_2, throughout a condensate system. It may be used at temperatures up to 593°C (1100°F). **ASR Tri-ACT 1800** effectively reduces condensate system maintenance costs and minimizes the potential of boiler tube failures caused by metallic corrosion products in the returned condensate.

PHYSICAL & CHEMICAL PROPERTIES

These properties are typical. Refer to the Safety Data Sheet (SDS) for the most current data.

Form	Liquid
Odor	Amine
Color	Light yellow
Density @ 25°C (77°F)	8.25 lb/gal
Specific Gravity @ 25°C (77°F)	0.995
Solubility in Water	Complete
pH 100% (typical)	12.9
Freezing Point	-13.3°C (8°F)
Freeze-Thaw Recovery	Complete
Viscosity @ 25°C (77°F)	5.0 cp
Flash Point (PMCC)	57°C (135°F)
VOC (%)	39.2
Measured VOC	Yes
Vapor Pressure @ 20°C (68°F)	11.0 mm Hg
Vapor Pressure @ 38°C (100°F)	28.0 mm Hg

ACTIVE CONSTITUENTS

ASR Tri-ACT 1800 contains the volatile amines cyclohexylamine, monoethanolamine and methoxypropylamine.

REGULATORY APPROVALS

Refer to the Regulatory Certifications & Registrations (RCR) document for the most recent information on approvals.

MATERIALS OF COMPATIBILITY

Material compatibility data are only valid for product storage and feed systems.

Compatible	Incompatible
304 SS	Brass
HDPE	Neoprene
Buna-N	Viton® synthetic rubber A
EPDM	Polyurathane
Polypropylene	CPVC
Plasite 4300 (vinyl ester resin)	LLDPE
	Phenolic Coatings
	Plasite 7122 (epoxy phenolic)

*The listed incompatibility of mild steel is due to previously noted problems with bulk storage. Condensation occurring within the tank causes unsubmerged surfaces to rust. The rust can be washed into the bulk product with the next tank fill and injected with the product into the condensate system.

DOSAGE AND FEEDING

The dosage of **ASR Tri-ACT 1800** will vary depending on the severity of the condensate environment. Exact dosage requirements will be determined by your on-site ASR sales engineer.

Overfeed of **Tri- ACT 1800** will result in a high pH in the condensate system. In the presence of oxygen, this will result in increased copper corrosion. In addition, overfeed of **ASR Tri-ACT 1800** will also result in excessive treatment costs.

Underfeed of **ASR Tri-ACT 1800** will result in a low pH in the condensate system. Low condensate pH will result in corrosion of plant process and condensate equipment. This corrosion will increase the amount of iron or copper returned to the boilers. These corrosion products can form deposits in high heat flux areas of the boiler, leading to higher maintenance costs and potential tube failure.

ENVIRONMENTAL AND TOXICITY DATA

Refer to the Safety Data Sheet for aquatic and mammalian toxicity information.

Product	mg/l of product
Chemical Oxygen Demand (COD)	524,000
Total Organic Carbon (TOC), Theoretical	210,000

SAFETY AND HANDLING

Read the product label and Safety Data Sheet for complete safety and handling information prior to using this product.

Please refer to of the SDS for proper personal protective equipment (PPE) and for health effects.

STORAGE

ASR Tri-ACT 1800 has a suggested in-plant storage limit of one year. Refer to the Safety Data Sheet (SDS) for the most current data.

REMARKS

If you need assistance or more information on this product, please call your nearest ASR representative.

For **Medical and Transportation Emergencies** involving ASR products, please see the Safety Data Sheet for the phone number.

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