

# Product Bulletin

## ASR ELIMIN-OX 780

*Chemical Oxygen Scavenger*



### PRODUCT DESCRIPTION AND APPLICATION

**ASR ELIMIN-OX 780** is an organic corrosion inhibitor used for scavenging oxygen and passivating metal surfaces.

**ASR ELIMIN-OX 780** can be used as a direct replacement for hydrazine in boilers without the safety hazards and handling precautions associated with hydrazine.

**ASR ELIMIN-OX 780** reduces corrosion rates because it passivates feedwater and boiler internal systems. Lower corrosion rates from passivation translate directly into lower maintenance costs and reduced boiler downtime.

**ASR ELIMIN-OX 780** can be used in boiler systems operating at pressures up to 2,500 psig (172 barg). **ASR ELIMIN-OX 780** does not contribute dissolved solids, so it can be used ahead of spray attemperation water take-offs. It can also be used for wet lay-up of boilers and non-drainable superheater.

### PHYSICAL & CHEMICAL PROPERTIES

Form	Liquid
Appearance	Colorless
Odor	None
Specific Gravity @20°C	1.02
Density	8.5 – 8.6 lb/gal (1.02 – 1.03 kg/L)
pH (Neat)	8.3
pH (1%)	6.7
Solubility in Water	Complete
Viscosity @15°C	3.0 cps
Freeze Point	-2°C
Flash Point (PMCC)	N/A

NOTE: These physical properties are typical values for this product. Please refer to the

Material Safety Data Sheet (MSDS) for the most current data and complete information.

### ACTIVE CONSTITUENTS

Ingredients are considered proprietary. See the MSDS for information on regarding hazardous components.

### REGULATORY APPROVALS

**ASR ELIMIN-OX 780** cannot be used to treat boilers where steam produced will contact food or food products. It may be used in boilers where steam is utilized in the manufacture of paper and paperboard that might be employed for food contact purposes.

**ASR ELIMIN-OX 780** is not approved by the USDA. **ASR ELIMIN-OX 780** is not regulated as a hazardous waste or toxic pollutant.

Please refer to the MSDS, SECTION 15, for the most recent information on approvals.

### MATERIALS OF COMPATIBILITY

<u>Compatible</u>	<u>Not Compatible</u>
Buna-N	Bronze
Hypalon	Copper
Plasite 7122	Mild steel
Polypropylene	Neoprene
Stainless steel	Nickel
Teflon	Nylon
Vinyl	
Viton	

See your local ASR representative for compatibility information.

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## DOSAGE AND FEEDING

The feedwater dosage of **ASR ELIMIN-OX 780** will vary based on the feedwater oxygen level, boiler operating pressure and the boiler water cycles of concentration. For your specific application, your local ASR sales engineer will make the appropriate feed rate recommendations.

**Underfeed** of **ASR ELIMIN-OX 780** will result in serious oxygen corrosion to the preboiler, boiler and condensate system. Severe damage can occur very quickly in economizers or feedwater preheaters. Oxygen corrosion will also increase iron levels in the feedwater. Iron deposits will form in the high heat-flux areas of the boiler and could possibly cause tube failures.

**Overfeed** of **ASR ELIMIN-OX 780** will result in high levels of ammonia in the condensate system. This may be sufficient to increase the measured pH of the condensate system. The neutralizing amine dosage should not be reduced. This would result in inadequate protection of the condensate system. The combination of ammonia and oxygen in-leakage is extremely corrosive to copper-containing metallurgies.

Overfeed will also significantly affect the cost of the chemical program.

For complete dosage, feeding points and feeding equipment, consult your ASR representative.

## ENVIRONMENTAL AND TOXICITY DATA

Biological Oxygen Demand (BOD5)	N/A
Chemical Oxygen Demand (COD)	N/A
Total Organic Carbon (TOC)	N/A

Please refer to the MSDS, SECTIONS 11 and 12, for the most current data.

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## SAFETY AND HANDLING

Please refer to the MSDS, SECTIONS 3 and 8, for the most current data.

## STORAGE

Store **ASR ELIMIN-OX 780** at temperatures below 49°C and above 4°C to avoid loss of stability and precipitate formation. Once formed, the precipitate cannot be resolubilized and loss of product activity will occur.

Keep **ASR ELIMIN-OX 780** from freezing. Freeze-thaw recovery is incomplete (small amount of precipitation). Freeze point is -2°C.

The in-plant storage limit for **ASR ELIMIN-OX 780** is one year under proper storage conditions.

Bulk tanks should be of polyethylene or stainless steel construction.

Please refer to the MSDS, SECTION 7, 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 Material Safety Data Sheet for the phone number.