

Product Bulletin

ASR CORROSION INHIBITOR 123

Corrosion Inhibitor



PRODUCT DESCRIPTION AND APPLICATION

ASR CORROSION INHIBITOR 123 is a clear organic liquid designed to protect ferrous and non-ferrous metals from acid attack during cleaning, pickling, and other process applications. It forms a stable, protective molecular film on metal surfaces that minimizes hydrogen evolution and pitting corrosion without interfering with acid efficiency. The product is completely soluble in water and can be blended easily with most acid systems such as HCl, H₂SO₄, or organic acids. ASR CORROSION INHIBITOR 123 is compatible with other additives commonly used in acid cleaning formulations.

PHYSICAL & CHEMICAL PROPERTIES

| Property | Typical Value |
|------------------------|--------------------------|
| Form | Clear liquid |
| Appearance | Colorless to pale yellow |
| Odor | Mild amine-like |
| Density | 8.6 – 9.0 lb/gal |
| Specific Gravity @25°C | 1.03 – 1.08 |
| pH (Neat) | 8.0 – 9.5 |
| Viscosity @25°C | 1.0 – 1.3 cps |
| Freeze Point | 2 °C |
| Freeze–Thaw Recovery | Complete |
| Flash Point (PMCC) | >110 °C |
| Solubility in Water | Complete |

NOTE: These physical properties are typical values for this product. Please refer to the Safety Data Sheet (SDS) for the most current and complete information.

ACTIVE CONSTITUENTS

The active ingredients of ASR CORROSION INHIBITOR 123 are proprietary organic bases and stabilizers formulated in an aqueous medium to achieve excellent metal passivation and long-term stability.

REGULATORY APPROVALS

ASR CORROSION INHIBITOR 123 contains no regulated heavy-metal salts or halogenated organics and complies with general industrial chemical standards for water-treatment additives. For specific regulatory certifications, refer to the SDS or contact your ASR representative.

MATERIALS OF COMPATIBILITY

| | |
|-----------------|----------------|
| Compatible | Not Compatible |
| Carbon Steel | Aluminum |
| Stainless Steel | Copper |
| PVC | Copper Alloys |
| Polyethylene | Brass |
| Polypropylene | Nickel |
| Teflon (PTFE) | — |
| Viton | — |

DOSAGE AND FEEDING

The required dosage of ASR CORROSION INHIBITOR 123 depends on acid type, concentration, temperature, and exposure time. A typical initial dosage range is 0.1 – 0.5 % v/v of the total acid solution. For your specific application, the local ASR technical representative will determine the optimal feed rate based on corrosion test data. Maintain adequate mixing to ensure uniform dispersion throughout the system. Do not overfeed; excessive dosage may reduce acid efficiency.

ENVIRONMENTAL AND TOXICITY DATA

Refer to SDS Sections 11 and 12 for full aquatic and mammalian toxicological information. The product contains biodegradable organic components and is free from chromates or nitrites.

SAFETY AND HANDLING

Read the product label and SDS carefully before use. Wear suitable gloves, goggles, and protective clothing during handling. Avoid contact with strong oxidizing agents and acids in concentrated form. In case of contact with eyes or skin, rinse immediately with plenty of water and seek medical attention if irritation persists. Consult SDS Section 8 for recommended personal protective equipment (PPE).

STORAGE

Maximum storage temperature is 49 °C. Store in a cool, well-ventilated area away from direct sunlight and strong acids. Recommended in-plant storage period is six months. Avoid repeated freeze–thaw cycles. Refer to the SDS, Section 7, for detailed storage information.

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.