



## TECHNICAL DATA SHEET – MS-7CZ

Revised: 11/2020

### THE STANDARD PRIMER FOR PRESERVING STEEL

#### PRODUCT DESCRIPTION

AST MS-7CZ RUST INHIBITIVE PRIMER is a lead and chromate free, rust inhibitive, two-component, epoxy primer specifically designed for use in conjunction with ITW Performance Polymers' coatings applied to metal substrates. It meets USDA standards for maintenance protective coatings not in direct contact with food in federally inspected meat and poultry plants.

#### USE & BENEFITS

AST MS-7CZ RUST INHIBITIVE PRIMER is recommended for use as a metal primer in severe industrial and chemical environments. It possesses excellent adhesion to properly prepared iron and steel surfaces, providing rust resistance to ferrous substrates, both on initial application and in the event of damage to the topcoat. It can be used under many epoxy, urethane, vinyl, chlorinated rubber and coal tar/epoxy finish coats.

The 7CZ Primer contains a new, state-of-the-art compound that was created by combining zinc and phosphate at the molecular level. Zinc complexed with phosphate becomes a non-metallic compound that is completely different, from regular, inorganic zinc. Inorganic zinc primers are made from ground metallic zinc powder mixed with a very basic inorganic polymeric liquid. Rust Inhibitive 7CZ Primer, on the other hand, is made up of a very high quality, 2-component, polyamide epoxy and a small amount of zinc complexed with phosphate. Rather than metallic zinc, the 7CZ Primer has very good anticorrosion properties and promotes adhesion of steel to epoxy grout.

#### SURFACE PREPARATION

**Steel:** Surfaces must be dry, clean and free of all previous coatings, rust and surface contamination. Minimum surface preparation is abrasive blast to Commercial Grade SP-6. Blasted surfaces must be coated within 8 hours. Prior to blast cleaning, remove all deposits of oil or grease using Solvent Clean method SP-1.

**Previously Painted Surfaces:** If the paint is peeling or degrading in any way, it should be completely removed by sanding, blasting or stripping. If previous paint coating is completely intact, the surface may be cleaned with a strong detergent or solvent and scuff sanded to remove the gloss. A spot test should be made by applying a small amount of coating over old paint. The old finish may wrinkle or lift within 60 minutes. If it does not, wait 5 days and test for adhesion. Do this by cutting an "X" into the coating, place tape firmly over the cut, then pull the tape with a hard, fast pull. If the old finish fails, it must be removed.

# MS-7CZ

ANTI-CORROSIVE LOW V.O.C. METAL PRIMER  
MIL-PRF-24667C

**APPLICATION INSTRUCTIONS**

- Applications should only take place when material, surface, and ambient temperature are all above 55°F (13°C) and at least 5°F (3°C) above the dew point. Application not recommended with surface temperatures over 120°F (49°C).
- AST MS-7CZ RUST INHIBITIVE PRIMER should be applied to a minimum 2-3 mils (50-75 microns) dry film thickness above the averaged surface profile and a maximum of 6 mils (152 microns) DFT.
- AST MS-7CZ RUST INHIBITIVE PRIMER can be applied by spray, roller or brush. Spraying should be done perpendicular to the surface to insure complete coverage. Each pass of the spray gun should overlap the previous pass by 50%. Weld seams and edges should be stripe coated prior to complete prime coat.
- AST MS-7CZ RUST INHIBITIVE PRIMER is a two-part compound. Mechanically mix the base portion until homogenous. Pour the hardener into the container of base material and mechanically stir thoroughly until uniform (approximately three minutes). **NO THINNERS MAY BE ADDED.** Make sure that all sediment is stirred up off the bottom of the can.
- AST MS-7CZ RUST INHIBITIVE PRIMER does not require the usual induction period and may be applied immediately after mixing. Working pot life is 4 hours at 70°F.
- The primed surface should be protected from contamination.
- If the top coat or grout application is delayed so that the surface becomes contaminated, clean the area again.
- Clean tools and spray equipment immediately after completing installation using an epoxy solvent compliant with state and federal V.O.C. regulations.

**PHYSICAL PROPERTIES**

COLOR	Gray
VOLUME SOLIDS - %	71%
POT LIFE	4 hours @ 70°F (21°C)
DRY TIME	Tack Free – 1.75 hour @ 70°F (21°C) To Recoat - 12 hours @ 70°F (21°C)

**PRODUCT SPECIFICATIONS**

COVERAGE	270 sq. ft./gal. (4 mils DFT / 6.5 mils WFT)
APPLICATION TEMPERATURE	55°F minimum to 95°F maximum + (13°C minimum to 35°F maximum +) 5°F (3°C) above dew point
SHELF LIFE	12 months
RELATIVE HUMIDITY	85% maximum
REDUCER	None
CLEAN UP	IMPAX IXT-59 Solvent
WEIGHT PER GALLON	12.7 lbs. per gal. (1.52 kg./liter)
UNIT PACKAGING	Resin (NH): 2.9 L (0.77 gal) in a 1 gal can Hardener (NH): 0.87 L (0.23 gal) in a quart can
UNIT WEIGHT	Resin: 4.9 kg (10.8 lbs) Hardener: 0.86 kg (1.9 lbs)

**CAUTION:** Read Safety Data Sheet before using this material. Use only with adequate cross ventilation. Keep away from extreme heat, sparks and open flame. Keep from freezing. Avoid prolonged breathing of vapors. For dizziness, seek fresh air. Avoid contact with skin. Use gloves, goggles and coveralls. In case of spillage on clothing, change clothing to prevent prolonged contact with skin. Wash contaminated clothing before reuse. In case of accidental contact with skin, wash immediately with soap and water. In case of eye contact, flush thoroughly with plenty of water and call physician. If swallowed accidentally, do not induce vomiting. Seek medical attention immediately. The user of this product is responsible for making its own evaluation and tests regarding the capabilities, safety, utility, suitability and application of the product, and assumes all risks and liabilities resulting from the use or application of the product, whether used alone or with other products. ITW Polymers Sealants North America, Inc. (herein referenced to as the COMPANY) warrants only that the product conforms to the specifications contained in product Technical Data Sheets published By the COMPANY, a copy of which is available to the user. If the product fails to conform to this warranty, the user shall return the product within 10 days of the purchase date with a note specifying the defect and the COMPANY will either replace the product or at its option, return the purchase price. EXCEPT AS EXPRESSLY PROVIDED IN THIS PARAGRAPH, THE COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, NATURE OR DESCRIPTION, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND HEREBY DISCLAIMS THE SAME. In no event shall the COMPANY be liable to the user of this product, whether in contract or in tort or any other legal theory (including, without limitation, negligence), for damages which exceed the purchase price of the product, or for any indirect, incidental, consequential or similar damages, arising out of sale, use or application of the product, or for any claim made against the user by any other party, even if ITW Polymers Sealants North America, Inc. has been advised of the possibility of such claim.