



# ATP<sup>®</sup>-642

## protective coating to control oxide scale

### Description

A water-based, ceramic coating formulated to protect stainless, low alloy, & carbon grade steels against oxide scale, oxidation, and decarburization

### Performance Characteristics

- effective temp. range 1500-2300° F (816-1260° C)
- minimizes formation of oxide scale by 70%
- reduces surface defects such as forged or rolled-in scale
- reduces secondary finishing operations
- spalls on cooling to leave oxide scale-free surface
- demonstrates exceptional green strength upon proper drying to withstand cracking, chipping, peeling, etc.
- excellent paintability; formulated for brushing application (can be adjusted for dipping or spraying by diluting with water – do not thin coating too much)
- desirable heat retention properties for improved hot working operations

### Recommendations for Use

- **thoroughly suspend and mix before use**
- metal surfaces must be free of dirt, oil, grease, metal oxides, and other materials
- coating thickness depends on the time and temperature of exposure (generally, the higher the temperature and longer exposure, the thicker the coating should be applied)
- a wet film thickness of  $6 \pm 3$  mils should be optimal
- ensure bottom coat is thoroughly dried when applying multiple coats
- water-based coatings need ample time to completely dry before entering furnace (can be applied over preheated substrate to accelerate drying time)

### Typical Properties

pH	6.0-9.0
% Solids	57.0-61.0
Vehicle	Water
Viscosity (@ 25°C) as Supplied (cP)	5,000-9,000
Weight/Gallon (lb/gal)	13.75 $\pm$ 0.25
Specific Gravity	1.62-1.68

Color	taupe/dark brown
Shelf Life	~1 year

## Product Safety

Before handling the materials listed in this bulletin, read and understand the product MSDS (Material Safety Data Sheet) for additional information on personal protective equipment and for safety, health, and environmental information.

No chemical should be used as or in a food, drug, medical device, or cosmetic, or in a product or process in which it may contact a food, drug, medical device, or cosmetic until the user has determined the suitability and legality of the use. Since government regulations and use conditions are subject to change, it is the user's responsibility to determine that this information is appropriate and suitable under current, applicable laws and regulations.

Advanced Technical Products Supply Co., Inc. requests that the customer read, understand, and comply with the information contained in this publication and the current MSDS(s). The customer should furnish the information in this publication to its employees, contractors, and customers, or any other users of the product(s), and request that they do the same.

## Storage and Handling

ATP®-642 should be stored indoors in the original unopened and undamaged container, in a dry place at a temperature not exceeding (40° C). Exposure to direct sunlight should be avoided.

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