



COATINGS FOR INDUSTRY, INC.

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manufacturers of



Aseal 625

Description

Aseal 625 is an aluminum rich coating applied with standard paint spray equipment that diffuses into the substrate to provide oxidation and erosion resistance. The coating can be used on all nickel based alloys.

Application

Degrease part to be coated and grit blast using 100 mesh AL_2O_3 grit. **Note:** Cleanliness is of the utmost importance. The blast media must be new and free from contamination, air must be free of oil and moisture. After blasting, Aseal 625 is applied at approximately 1 mil per coat. Prebake at 175°F. for approximately 30 minutes. Then bake at 300°F. for 20 minutes. Apply second coat and prebake at 175°F. for 30 minutes. Cure total system at 500°F. for 30 minutes.

Parts are then placed in argon gas oven at 1975°F. for four hours. The degree of diffusion can be controlled by the coating thickness and temperature. Diffusion temperature as low as 1600°F. can be used.

After parts are removed from argon atmosphere oven and cooled, the friable residue can be removed by light blasting with glass beads.

Caution:

Phosphide may be given off during high temperature (1600°F.) treatment. Use only in well ventilated areas, all ovens should be exhausted to outside and away from all personnel.

Contains aluminum metal powder, phosphate and dichromate. Normal precautions should be taken for handling of acidic materials. Avoid ingestion. HARMFUL OR FATAL IF SWALLOWED. Avoid inhalation of spray mist and contact with eyes. In case of eye contact, flush immediately with plenty of water and consult of physician. Avoid prolonged or repeated contact with skin. For skin contact, flush with plenty of water.

When spraying, a suitable exhaust system should be used. If spray mist is not completely removed from air, a suitable respirator should be used such as #9910 manufactured by 3M Co., or an equivalent type.

In case of spill use absorbing material to soak up and neutralize with sodium bicarbonate. Do not use strong alkalis. Then flush area with water.

Waste Disposal Method: Filter to remove aluminum and discard as solid chemical waste. Treat remaining liquid with sodium metabisulfite, then precipitate trivalent chromium by neutralizing with alkali such as lime. Dispose of waste in accordance with federal, state and local environmental control regulations.

Important: Avoid direct contact with alkalis and strong oxidizing or reducing agents since this may produce hydrogen gas.

Since this compound contains aluminum powder, a clean spray area and duct system are important. It is hazardous to allow an accumulation of dried material to occur since this dried material in the form of dust could be ignited by spark or other means and possibly cause a dust explosion as with any finely divided powdered material.

Note: Some manufacturers requiring this coating composition develop their own application and cure procedure specifications and in all cases they should be followed in place of the foregoing procedures.