

CASWELL SEALER

HULLCOAT WDC

An Aqueous Based Protective Coating for Metals

TYPICAL APPLICATIONS

Zinc or zinc alloy plated articles - not chromated

HULLCOAT WDC will increase the corrosion resistance and improve resistance to finger print staining

Chromate conversion coatings on aluminium, zinc and zinc alloys

HULLCOAT WDC increases the corrosion resistance, improves abrasion resistance and improves adhesion of subsequent paint or lacquer

Decorative brass or nickel-brass plated articles

HULLCOAT WDC improves tarnish and corrosion resistance, helps to prevent spotting out

Black oxide coatings on steel, zinc and cadmium

HULLCOAT WDC improves corrosion resistance and Appearance

Phosphate coating on steel

HULLCOAT WDC can be used instead of oil on phosphate coatings, does not need to be removed prior to painting or lacquering. Can be used to protect pre-paint phosphate coatings if unable to paint immediately

Oxidized copper and Florentine bronze

HULLCOAT WDC improves corrosion resistance and Appearance

Bright dipped or polished copper and brass and polished silver

HULLCOAT WDC imparts a tarnish and corrosion resistant film which improves resistance to finger print staining

DESCRIPTION

CASWELL SEALER is HULLCOAT WDC, a clear, odourless, copolymerized acrylic water-phase solution which forms a film to give corrosion and scuff protection to metal when used as a final dip in plating or chemical process treatment. Since the process is a water-phase solution containing no organic solvents, it is non-flammable and produces no air polluting fumes. Thus both fire hazards and air pollution problems are eliminated.

The final film is stable to light and heat. It imparts a clear, high gloss, high strength, insoluble film with excellent adhesion. The film resists weathering and corrosive atmospheres.

CASWELL SEALER is also used as a base for paint and lacquer to provide better bonding or interim protection.

CASWELL SEALER is grease and oil resistant. The film is easy to remove by stripping in a strong alkaline cleaner. Film can be removed in 30 seconds to one minute depending on the film thickness.

CASWELL SEALER is a stable material and can be operated in a dip tank for almost an indefinite period with normal maintenance additions, providing contamination by drag-in is avoided.

IMPORTANT APPLICATIONS

As a protective coating over brass-flashed bright nickel or furniture fittings and house-wares, **CASWELL SEALER** passes a 96 hour salt spray test and a 200 hour humidity test.

Applied over Tripass ELV Blue trivalent chromium conversion coating on zinc, CASWELL SEALER passes a minimum of 120 hours salt spray.

Polished metal parts protected with **CASWELL SEALER** may be subjected to forming operations without scratching or damaging the coating.

Films formed from dilute solutions of **CASWELL SEALER** firm up chromate coatings so that a more gradual leach factor and longer term protection will result. Increased service life of plated, chromated, dyed parts and furniture tubing can be attained in this way.

HOW TO USE

MAKEUP:.

Required concentrations will vary with use and desired properties of the final film, higher concentrations results in greater protection. A 10% by volume solution will give finger print protection. Where exceptional protection or heavy film is needed, **CASWELL SEALER** may be used at full strength. The solution is made up by adding **CASWELL SEALER** to the required amount of water whilst agitating.

OPERATING CONDITIONS:

Concentration 10 - 100% by volume
Temperature Normally ambient but full range is 20 - 65°C
Time 10 - 30 seconds
pH 7.6 - 9.0
Drying Atmosphere air dry or fan force hot air if required

Keep covered when not in use

MAINTENANCE:

CASWELL SEALER operates at pH 7.5 to 9.0 measured electronically using a standard pH electrode/temperature gauge pair. If pH falls below 7.5, it may be corrected by additions of 0.15 to 0.30mL of ammonia per litre (diluted 1 to 1 with water). If there is an acidic film on the surface of the work when **CASWELL SEALER** is applied, there is a tendency to precipitate the resin on the surfaces of the parts being processed and suitable films are not obtained. Thorough rinsing or neutralization must be employed to avoid precipitating the resin or seeing white staining over darker background substrates.

In order for **CASWELL SEALER** to be effective, parts being dipped should be wet with no water breaks before dipping. However, dyed, chromate treated parts will show less bleeding if the work is dried before dipping in **CASWELL SEALER**.

If the base metal being coated is bright and smooth, an objectionable iridescence may appear after drying. Operating the **CASWELL SEALER** at a higher concentration thereby producing a heavier film can eliminate this iridescence.

A one litre solution of **CASWELL SEALER**, at a dilution of 1 to 1 by volume, will cover 12 to 60 square metres of surface depending on part size, part geometry and surface finish. Uniform temperature throughout the solution is important.

EQUIPMENT REQUIRED:

Tanks	Stainless steel, PVC or Polypropylene
Filtration	Occasionally required via over the side tank cartridge filtration
Ventilation	Not required

PRECAUTION:

CASWELL SEALER may cause eye and skin irritation due to the products alkalinity.

The vapours may be mildly irritating to the eyes and respiratory tract.

Rubber gloves and chemical eye goggles should be worn when handling the product.

Use only in well ventilated areas.

Keep container tightly closed when not in use.

In case of eye contact, immediately flush the eyes with plenty of water; call a physician.

In case of skin contact, wash with soap and water.