

Description

Republic CSH-7 is a multi-coat, two component liquid lining compounded from Hypalon (chlorosul-fonated polyethylene). It possesses excellent resistance to oxidizing agents, acids, and hot caustic solutions. CSH-7 Hypalon Elastomeric Liquid Lining is the lining of choice for tough service conditions where sheet linings cannot be installed. Standard total thickness is .020".

Uses

- Tank and hopper cars
- Trucks
- Vessels
- Pickling tank covers
- Areas subjected to severe fumes and splashes

Advantages

- Outstanding physical properties make CSH-7 highly resistant to extreme conditions, including high heat and caustic environments, found in many chemical processing plants.
- CSH-7 maintains its elastomeric characteristics for the life of the coating application providing a tough, flexible protective film for an economical and extended service life.

Surface Preparation

Sandblast surface to a white metal (SSPC-SP5) and remove all dust, dirt, grease, etc. Sharp corners or edges must be ground to a radius.

Preparation Of Coatings

Republic HP-7 Primer is a one component material ready for application after thorough stirring. CSH-7 is a two-component material shipped in the proper weighed proportion for mixing. The 5-gallon unit consists of a 1-gallon can containing Republic H-7. Activator is supplied in a quart can and contents of can must be mixed with each 5-gallon pail of CSH-7. Prior to mixing, stir CSH-7 thoroughly and continue to stir while adding the full quantity of the Activator.

Application Of Primer

HP-7 Primer may be applied by brush, roller, or spray. The surface must be thoroughly dry before application of the primer. Stir the contents of the can containing the primer and apply 1 even coat to the clean metal surface. Allow to dry a minimum of 1 hour. Under adverse conditions, such as low temperatures, poor air circulation, etc., up to 4 hours may be necessary. Since HP-7 is an inhibitive type primer, where necessary, it can remain uncoated for several days before application of top coats. The primer must be dry and clean before

Technical Information

Colors	Black and tan.
Application	Roller, brush or spray.
Coverage	Primer: 0.162gal/100 sq. ft. (per dry mil). Black: 0.285 gal/100 sq. ft. (per dry mil). Tan: 0.266 gal/100 sq. ft. (per dry mil).
Unit Coat Thickness	6–8 dry mills/coat (brush or roller). 6 dry mills with spray.
Primer	HP7.
Unit Coat Thickness HP-7 Primer	1 dry mil/coat.
Accelerator	H-7 Accelerator.
Thinner & Cleaner	N-450-1.
Pot Life	4 hours @ 75°F (24°C).
Storage Stability	1 yr. unopened @ 74°F (23°C) from date of manufacture.
Specific Gravity	1.3 (Black). 1.3 (Tan).
Density	10.6 lbs./gal. (Black). 10.8 lbs./gal (Tan).
Flash Point	40°F (4°C) CSH-7. 40°F (4°C) H-7 450 V Accelerator. 55°F (13°C) HP-7 450 V Primer.
Available In	5-gal and 55-gal containers.

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Republic Powdered Metals Coatings and Lining Systems

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CSH-7

Hypalon Elastomeric Liquid Lining

coating. The primer wet film thickness is 3 to 4 mils; the dry film thickness is 1 mil or sufficient dry film thickness to cover the blast profile.

Application Instructions

BY BRUSH – Use wet brush at all times. Avoid scrubbing action. Apply H-7 without thinning. Allow approximately 1 hour drying time between coats.

BY ROLLER – Apply as normal. It is characteristic of Hypalon coatings, when roller applied, to have a slight orange-peel surface skin. This does not detract from the serviceability of the coating.

BY SPRAY – Conventional air atomized spray with pressure feed or airless spray equipment may be used. Industrial spray equipment of adequate capacity should be utilized to allow flexibility in gun and tip selection for the job requirement. For airless spray application, Republic recommends a Graco 30:1 Bulldog Pump with a 50 ft. 3/8" I.D. static grounded nylon hose, a standard contractor model gun, and an HD RAC 319 (.019") spray tip. For proper spray atomization, 2,400 to 3,000 psi is desired.

Apply a uniform mist coat of CHS 7 and allow to dry approximately 30 minutes with adequate ventilation. Subsequent coats may be 2-pass spray applied which yield approximately 6 mils dry film thickness per coat. Normal drying time between coats is 1 hour with adequate ventilation, but this may vary depending on adequate air movement.

Curing is not required until all coats have been applied. Do not apply heat until the final lining has dried overnight with good

ventilation. The temperature is to be raised slowly until the final temperature is achieved. Maintain a selected temperature for time indicated.

150°F (66°C): 16 hours

170°F (77°C): 8 hours

190°F (89°C): 4 hours

210°F (99°C): 2 hours

Exhaust steam cure: 4–8 hours at 210°F (99°C).

Repair

Remove damaged lining and any corrosion on metal by grinding or disc sanding. Clean area. Wipe area with a cleaner being careful not to loosen the coating edges.

Apply a coat of HP-7 Primer to exposed metal. Allow to dry a minimum of 1 hour.

Apply brush coats of activated HP-7 to the primed area feathering out the edges onto wiped surfaces of the existing coating. Allow 1 hour of drying time between coats. Twenty mils will require approximately 3–4 coats.

Allow finished repair to dry 24 hours with good ventilation before curing. Spot cure can be accomplished with heat lamps. Allow 16 hours.

Limitations

Sandblasting, priming, coating, or lining should not be carried out under conditions of high humidity or when the temperature is within 5° of the dew point.

The Republic Powdered Metals Coating & Lining Systems Philosophy

There are no short-cuts to success and no "cure-all" products in the corrosion protection business. A "system" approach is the only means to achieving long-term protection. Republic has the necessary primers, adhesives, sealants, and caulking compounds that are compatible with a wide variety of protective coatings and linings to provide a complete system of protection for abrasion, corrosion and chemical attack problems.

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