

CORROSIONX HEAVY DUTY

High performance, thick-film version of CorrosionX
Provides long-term lubrication and protection against rust.

GENERAL INFORMATION

CorrosionX HD is an extremely effective corrosion inhibiting coating. Compared to other, conventional products, many advantages can be put forward. CorrosionX HD does not contain any Lead, Isocyanides or Cr6. Thanks to its Polar Bonding Technology it provides maximum adhesion to steel and extraordinary dielectric abilities isolating the anode and the cathode. It does not require sandblasting before the treatment and is easy to apply. This means a great cost benefit!

Was developed specifically to provide maximum protection against moisture intrusion and resulting rust and corrosion.

Will slowly penetrate existing rust and corrosion, remove moisture and stop electrolysis, while sealing out moisture.

CorrosionX Heavy Duty forms a dripless, dynamic, non-hardening, self-healing film that stubbornly resists erosion by splash or spray, including the complete submersion in saltwater.

Unlike wax-based coatings, it will not dry out, stiffen, or crack under stress.



DESCRIPTION OF APPLICATION

CorrosionX HD forms a wet film, providing ultra long term protection against corrosion in most environments, exceeding 2000 hours in salt spray testing (ASTM B-117). It is designed for virtually all kinds of uses, even new machinery, vehicles, ships, drilling rigs and other industrial installations, as well as for lubrication application in extremely severe corrosive environments.

CONDITIONS

Equipment may be used in all weather conditions, except under the waterline of ships and other constantly immersed application.

PREPARATIONS

Remove any rough soiling, if existent.

APPLICATION

Just spray CorrosionX HD inside the machinery, so that a long-term protection is achieved. If you have existing corrosion, we recommend a treatment with CorrosionX, on affected areas first, for a better penetration. CorrosionX will penetrate through it and stop the corrosion process!

For even better efficiency, we recommend our Spray System.

Application temperature

+5°C to 50°C

Permanent Processing Temperature

-60°C up to +120°C

TESTING

Dulux conducted and international salt spray test, this test proved that no rust formed for 1008 hours in a salt spray bath at 35 degrees celsius.

The German Army lab shows 2.000 hours no rust in salt spray cycles of 6.

(All test results are available on request)

TECHNICAL CONSIDERATIONS

Boiling point of CorrosionX HD is > 210°C / 400°F at which point the base oil will drip and/or cook off. This will not diminish the corrosion protection properties of the product since the base oil is merely a carrying agent for the active ingredient package. However, this will shorten the product's lifespan as dripping/cooking off will remove the excess product, thereby removing the coating's ability to self-cure. So once the layer that is bonded to the metal surface is consumed by the environment, there would be no product to replace that which was removed. Recommend monthly visual inspection and annual re-application if exposed to temperatures higher than 200°C

There is really no operational low limit (because again, the base oil is merely a carrying agent for the active ingredients), but at -6°C / -21°F the product will thicken, which makes it more difficult to apply.

Additional Product Data

Specific Gravity: @15.6°C 0.911

Viscosity, cSt: @ 40°C 393.84 cSt @ 100°C 275.80

Flash Point c.o.c.: >142°C

Pour Point: -7°C

Boiling Point: >100°C

Volume Solids: 91.5%

VOC: 3 g/L

Solubility in Water: Insoluble

Film Thickness: 0.012mm

Salt-spray, hrs: >2000h

Humidity Cabinet hrs: >1008h

Dielectric Strength: >20000V

Anti-Wear: 0.40mm

(The smaller the number the better the performance. Standard lubricating oil have a value of 1.0 – 1.2)

Storage: Bulk: Store at room temperature (10°C and more) Aerosols not more than 50°C

Shelf Life: Bulk: Indefinite as long as container remains capped. Aerosols: 2 years.

Recent Case Studies

Launching Tractor

A tractor pulls a commercial boat trailer twice a day into salt water on the west coast of NZ- Northland. The tractor drives through mud and backs down into salt water at least twice a day.

The vehicle is then stored outside.

Severe rust and lubrication problems on the 3 point linkages, electrical connections and the winch pulling the boat onto the trailer were the result. Since the complete tractor was sprayed with HD, the lubrication problems are solved. As a Corrosion Inhibitor, the HD is topped up about every 8 months where the tractor is submerged, once a year on all other parts.

Gentry Crane

An old Gentry Crane runs underneath the roof of a large shed used to paint yachts and trucks. Sanding dust, sand blast garnet and glass bead-blast used to clog up the greased parts like drive chains and cable winch parts. The grease was replaced with CorrosionX HD which does not accumulate the dust and garnet. Being a far better lubricant than the grease, the chains also run much better and the winch cable lasts longer.

Boat Trailers

The boat club members of a Northland Sailing Club were upset about the fact that the leaf springs on their submergible trailers were rusting out within 3 years' time, giving the boats a bumpy ride, causing embarrassment on the regattas and finally fail or break all together.

Since the trailers springs, some already rather rusty, were sprayed with HD, the boats get a smooth ride under transport and the rust has stopped to progress all together. The HD coating on the springs is topped up once a year at minimal cost

Aquarium

The winch operating the shark cage sunk into the large salt water Aquarium was rusting out on a regular basis. Standard greases and traditional rust preventers could not be used because of their toxicity. CorrosionX HD is not only a superb lubricant and corrosion inhibitor, it is also MPI approved for such applications and even IF some product would get into the Aquarium, there would be no damage to the aquatic life.

Shackles

Massive shackles used on the back of fishing trawlers working in the roaring 40 in pretty much any weather conditions had developed a habit to rust shut in a matter of only days. As fresh fish is handled in the same area on the boat, traditional, kerosene based lubricants were not applicable.

The other, environmentally friendly, lubricants, would quickly wash out and fail as a rust preventing measure. Introducing HD solved both problems of lubrication and long term rust protection.

HD is now available to the majority of the Antarctic Fishing Fleet.

<i>Machine/Part Applied:</i>	<i>Can Used as:</i>
Throttle Linkage/Cables	Corrosion Inhibitor, Lubricant
Frozen Couplers	Penetrant
Attachment Pins	Penetrant
Rollers	Lubricant
Bushings	Lubricant
Ramp Bars on Trailers	Lubricant
Cables	Corrosion Inhibitor, Lubricant
Pulleys	Corrosion Inhibitor, Lubricant
Trencher Chains	Corrosion Inhibitor, Lubricant
Hood Hinges	Corrosion Inhibitor
Key Switches	Corrosion Inhibitor
Battery Terminals	Corrosion Inhibitor
Wear Pads	Lubricant
Fittings/Hoses	Lubricant
Pumps	Corrosion Inhibitor
Chains, Groove	Lubricant
Transmission, Clutch	Corrosion Inhibitor
PTO Cable	Lubricant, Corrosion Inhibitor
Starters, Alternators	Lubricant, Corrosion Inhibitor