To provide the cleanest strip possible, most material is wet rolled at the temper mill. For rolled steel, VpCI-344 diluted with water can be used as a wet tempering fluid.

**PRODUCT DESCRIPTION**

VpCI-344 is a concentrated corrosion preventive liquid/metalworking lubricant for wet tempering of galvanized and cold-rolled steel, difficult-to-produce metal stampings, wire rope, tubular products, and machine parts. This water-based product utilizes Vapor phase Corrosion Inhibitor (VpCI) technology for maximum protection. VpCI-344 gives very good protection when coated on metal surfaces, and has a unique vapor phase action which protects uncoated and difficult-to-reach areas on casting and stamping equipment.

When used as directed, VpCI-344 prevents corrosion indoors for up to two years. VpCI-344 forms a clear solution in water. If needed, this product is designed to be removed with conventional alkaline cleaners.

**FEATURES**

- Water-soluble, environmentally friendly, and safe to apply
- Prevents flash corrosion on cold-rolled steel
- Very stable in hard water
- Does not affect slip characteristics
- Extends shelf life of finished product
- Will not clog filtration systems
- Forms a hydrophobic film
- Forms a clear, dry film which renders an attractive appearance to protected parts
- Unique vapor phase action protects uncoated surfaces and areas difficult to reach
- Is easy to remove, if necessary
- Nitrite- and phosphate ester-free
- Non-flammable
- Passes ASTM D-4627-86 (Test Method for Iron Chip Corrosion for Water-soluble Metalworking Fluids) at 2% by weight

**TYPICAL APPLICATIONS**

- Wet tempering
- Protection of hot-rolled, cold-rolled, and galvanized steel
- Coolant
- Quenching additives

**METAL PROTECTED**

- Hot-rolled steel
- Cold-rolled steel
- Galvanized steel
- Carbon steel
- Stainless steel
- Aluminum
- Copper
APPLICATION
VpCI-344 is dipped or sprayed onto the steel surface.
Add VpCI-344 to water as follows:

Wet tempering of steel:
1 part concentrate to 20-40 parts water

Short-term protection (1-6 months):
1 part concentrate to 50-60 parts water

Medium-term protection (6-12 months):
1 part concentrate to 40-50 parts water

For protection up to 24 months:
1 part concentrate to 20-40 parts water

TYPICAL PROPERTIES
Appearance Clear dark amber liquid
Film Type Dry, clear
Non-volatile Content 45-50%
pH 8.3-9.3 (Neat)
Density 8.7-8.9 lb/gal (1.04-1.07 kg/l)

PACKAGING AND STORAGE
VpCI-344 is available in 5 gallon (19 liter) plastic pails,
55 gallon (208 liter) metal drums, liquid totes and bulk.
The product should be sealed and stored in a heated
warehouse to avoid freezing. VpCI-344 has a shelf life of
24 months.