Standard Test Methods Reference Chart

VpCI Films

VpCI-125
ASTM B-257 – Surface Resistivity
ASTM D 882 – Tensile Strength/Elongation
ASTM D 1922 – Elmendorf Tear Strength
ASTM D 3420 – Puncture Resistance
ASTM F-3429 – Water Vapor Transmission Rate
ASTM D-3985 – Oxygen Transmission Rate
ASTM D6988-07 – Film Thickness
ASTM D1748 – Accelerated Corrosion
ASTM D1735 – Water Fog
MIL-PRF-81705D – Static Decay (VpCI-125 only)
MIL-PRF-22019E (Performance Requirements)
MIL-PRF-22020E
NACE TM0208-2008 – Vapor-Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-126 Blue, VpCI-126 Shrink, VpCI-126HPUV
ASTM D-882 (Tensile Strength at Break/Peak)
ASTM D-882A (% Elongation at Break)
ASTM D-1922 (Tear Test)
ASTM D-3420 (Puncture Resistance)
ASTM D6988-07 – Film Thickness
ASTM D1748 – Humidity
ASTM D1735 – Water Fog
ASTM D2732-30 – Shrink Test (shrink films only)
NACE TM0208-2008 – Vapor-Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives
MIL-PRF-22019E (Performance Requirements)
MIL-PRF-22020E

MilCorr VpCI Shrink Film
ASTM D-882 – Tensile Strength at Break/Peak
ASTM D-882A – % Elongation at Break
ASTM D1709, Method A – Dart Drop
ASTM D-1922A – Elmendorf Tear Strength
ASTM D-3420 – Puncture Resistance
ASTM D6988-07 – Film Thickness
ASTM D1748 – Humidity

Updated: 3/1/2016
CorrLam VpCI Barrier Laminate
ASTM D-882 – Tensile Strength at Break/Peak
ASTM D-882A – % Elongation at Break
ASTM D1709, Method A – Dart Drop
ASTM D-1922A – Elmendorf Tear Strength
ASTM D-3420 – Puncture Resistance
ASTM D6988-07 – Film Thickness
ASTM D1748 – Humidity
ASTM F3429 – Water Vapor Transmission Rate
ASTM D3985 – Oxygen Transmission Rate
NACE TM0208-2008 – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives
MIL-PRF-121 – Barrier Materials

VpCI Coated Paper – 144, 145, 146, 148, 149
TAPPI T-410 – Basis Weight
TAPPI T-411 – Caliper thickness, Tear strength
TAPPI T-494 – Dry Tensile/TEA
TAPPI T-404 – Stretch
TAPPI T-530 – Ink Float
TAPPI T-538 – Smooth
TAPPI T-541 – Internal Bond
TAPPI T-476 – Abrasion
TAPPI T-448 – WVTR (VpCI-144 and -148 only)
NACE TM0208-2008 – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives
MIL-PRF-3420H – VCI Treated Wrapping Materials, Opaque

Cor-Pak VpCI Fabric
ASTM D-1117 (Sheet Grab Tensile, Thickness)
MIL-P-58102 (Flexible Laminate Protective Sheet)
MIL-PRF-22019E (Modified)

Cor-Pak VpCI Stretch Film
ASTM D 882-91 (Ultimate Strength, Peak Elongation)
ASTM D-1922-94a (Tear Strength)
ASTM D-3420-95-20 (Impact Puncture)
ASTM D 5458-95 (Peel Cling)
MIL-PRF-22019E (Modified)

**Cor-Pak EcoWeave**
- Unit weight (ASTM D-3775)
- Tensile Grab Strength (ASTM D1682-64)
- Tear Strength (ASTM D-2261-71)
- MIL-PRF-22019E (Modified)

**Cor-Pak VpCI Reinforced Paper**
- TAPPI T-410 (Basis weight)
- TAPPI T-411 (Caliper)
- ASTM D 3420-95B (Impact Puncture)
- ASTM D-1922-94A (Tear Test)
- MIL-PRF-3420H

**Cor-Pak VpCI Linerboard**
- Basis weight (TAPPI T-410)
- TAPPI T-411 (Tear MD/CD, Caliper)
- TAPPI T-538 (Smoothness)
- MIL-PRF-3420H

**Cor-Pak VpCI Polycoated paper**
- ASTM D-689 (Tear test)
- ASTM F-1249 (MVTR)
- MIL-PRF-3420H

**Eco Film**
- DIN V 54 900 (Biodegradability Testing under practical conditions)
- RAL GZ251 (Regulations of the German Compost Quality Assurance Organization BGK concerning quality criteria and the quality assurance of compost)
- DIN 38412 Part 30 (German standard methods for the examination of water, waste water and sludge; bio-assays (group L); determining the tolerance of Daphnia to the toxicity of waste water by way of a dilution series (L30))
- Daphnia Test
- ISO 527 (Tensile and Ultimate Strength, Ultimate elongation)
- DIN 53363 (Tear propagation resistance)
- DIN 53380 (Permeation rates: oxygen)
- ASTM D 6400-99 (Specifications for Compostable Plastics)

**Eco Wrap**
- ISO 527 (Tensile and Ultimate strength)
- DIN 53363 (Tear Propagation resistance)
- DIN 53380 (Permeation rates: oxygen)
- DIN V 54 900 (Biodegradability Testing under practical conditions)

Updated: 3/1/2016
RAL GZ 251 (Regulations of the German Compost Quality Assurance Organization BGK concerning quality criteria and the quality assurance of compost)
DIN 38412 Part 30 (German standard methods for the examination of water, waste water and sludge; bio-assays (group L); determining the tolerance of Daphnia to the toxicity of waste water by way of a dilution series (L30))

**EcoShield Fabric**
- ASTM D-3775 (Construction, unit weight)
- ASTM D-1862-64 (Tensile Grab Strength)
- ASTM D-2261-71 (Tear Strength)
- ASTM D-1777 (Coating thickness)
- MIL-P-58102 (Flexible Laminate Protective Sheet)
- MIL-PRF-3420H
- MIL-PRF-22019E (Modified)

**EcoShield Paper**
- TAPPI T-410 (Basis weight)
- TAPPI T-411 (Caliper)
- MIL-PRF-3420H

**EcoShield VpCI Linerboard**
- TAPPI T-410 (Basis weight)
- TAPPI T-411 (Caliper)

**EcoSol**
- ASTM D-1922 (Tear Test)
- ASTM D-3420-95B (Impact-Puncture)

**Eco Works**
- ASTM D 6400-99 (Specifications for Compostable Plastics)
- DIN CERTCO
- DIN V 54 900 (Compostable testing)

**VpCI Emitters and Electronics Products**

**BioPad**
- NACE Standard TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability
- ASTM D6966-11 – BioBased Content

**EcoDevice**
- NACE Standard TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
MIL-I-22110C – Vapor Inhibiting Ability
ASTM D6966-11 – BioBased Content
OECD Method 301D – Biodegradability

**EcoEmitter**
NACE Standard TM0208-2008 – Vapor Inhibiting Ability
MIL-I-22110C – Vapor Inhibiting Ability

**Cor-Pak 1-MUL**
MIL-I-22110C – Vapor Inhibiting Ability

**ElectriCorr VpCI-238, 239, and 248**
ASTM D-1748 Humidity
ASTM B-117 Salt Spray
NACE RP0487-2000 – Selection of Rust Preventives

**ElectriCorr VpCI-286**
ASTM D-1748 Humidity
ASTM B-117 Salt Spray
NACE RP0487-2000 – Selection of Rust Preventives

**VpCI-101, 105, 111**
NACE TM0208-2008 – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives
MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-130 Series Foam**
NACE TM0208-2008 – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives
MIL-PRF-26514G, Type 3, Class II – Polyurethane Foam

**VpCI-150/170**
NACE TM0208-2008 – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives

**Desicorr**
MIL-D-3464E – Activated, Bagged Desiccant

**Desicorr VpCI**
MIL-D-3464E – Activated, Bagged Desiccant
MIL-I-22110C – Vapor Inhibiting Ability
NACE RP0487-2000 – Selection of Rust Preventives

**CorWipe 500**
ISO 2878 (Antistatic and conductive products - Determination of electrical resistance)

**Powders**

**VmCl-307**
- NACE TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-308/308 Pouch**
- NACE TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-309/309 Pouch**
- NACE TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-608**
- NACE TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-609**
- NACE Standard TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- OECD 306, BOD-28 (Marine Biodegradability Test)
- EPA/600/4-90/027F (Sea Water Toxicity Test)
- MIL-I-22110C – Vapor Inhibiting Ability

**VpCI-609 EcoPouch**
- NACE Standard TM0208-2008 – Vapor Inhibiting Ability
- NACE RP0487-2000 – Selection of Rust Preventives
- MIL-I-22110C – Vapor Inhibiting Ability

**Temporary Rust Preventives and Metalworking Fluids**

**BioCorr Rust Preventative**
- ASTM D-1748 – Humidity
- ASTM D-1735 – Water Fog
- ASTM D-6866-11 – Determination of Biobased Content
- NACE RP0487-2000 – Selection of Rust Preventives
CorrLube Food Grade Penetrant
ASTM D-97 (Pour point)
ASTM D-1748 (Humidity chamber)
ASTM D-130 (Copper Strip corrosion)
ASTM D-971 (Interfacial tension of oil against water)
ASTM D-445 (Kinematic Viscosity)
ASTM D-2161 (Saybolt viscosity)
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-316
ASTM D-130 – Copper strip corrosion test
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-322, 323, 326, 329 (and all variations thereof)
ASTM D-97 – Pour point
ASTM D-130 – Copper strip corrosion test
ASTM D-665 – Rust Preventing Characteristics
ASTM D-974 – Acid/Base number by titration
ASTM D-1401 – Water separability testing
ASTM D-1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM B-117 – Salt Fog
MIL-PRF-46002 – Contact and Volatile Corrosion Inhibited Oil
MIL-PRF-85062 – VCI Oil for Transmission and Gearbox
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-325
ASTM D-1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM G-53 – Cyclic UV/Humidity
MIL-L-63460 – Lubricant, Cleaner, and Preservative for Weapons and Weapon Systems
MIL-C-83993 – Water Displacement
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-340 CLP
ASTM D-1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM B-117 – Salt Fog
MIL-L-63460 – Lubricant, Cleaner, and Preservative for Weapons and Weapon Systems
NACE RP0487-2000 – Selection of Rust Preventives
VpCI-344
ASTM D-1748 – Humidity Test
ASTM D-4627 – Cast Iron Chip Test
ASTM G-31 – Immersion Corrosion Testing
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-345
ASTM D-1748 – Humidity Test
ASTM D-4627 – Cast Iron Chip Test
ASTM G-31 – Immersion Corrosion Testing
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-347
ASTM D-1748 – Humidity Test
ASTM D-4627 – Cast Iron Chip Test
ASTM D-2783 – 4-Ball E.P. Test
ASTM D5619 – Tapping Torque Test
ASTM G-31 – Immersion Corrosion Testing
NACE RP0487-2000 – Selection of Rust Preventives

VpCI-368/368D/368M
ASTM D-1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM B-117 – Salt Fog Cabinet
ASTM D3690 – VOC
ASTM D522 – Flexibility
MIL-PRF-16173E, Grade 1
NACE (Minimum Surface Preparation Guideline)
NACE RP0487-2000 – Selection of Rust Preventives
SSPC (Minimum Surface Preparation Guideline)

VpCI-369/369D/369M
ASTM D-1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM B-117 – Salt Fog Cabinet
ASTM D3690 – VOC
ASTM D522 – Flexibility
MIL-PRF-16173E, Grade 2
NACE (Minimum Surface Preparation Guideline)
NACE RP0487-2000 – Selection of Rust Preventives
SSPC (Minimum Surface Preparation Guideline)

VpCI-377, 378, 379
ASTM D1735 – Water Fog Cabinet
ASTM D-1748 – Humidity Cabinet
ASTM D-4627 – Cast Iron Chip Test
ASTM G-31 – Immersion Corrosion Testing
NACE RP0487-2000 – Selection of Rust Preventives

**VpCI-388, 389, 389D, 391**
- ASTM D-1748 Humidity
- ASTM B-117 Salt Fog
- ASTM D3690 – VOC
- ASTM D522 – Flexibility
- NACE RP0487-2000 – Selection of Rust Preventives
- NACE (Minimum Surface Preparation Guideline)
- SSPC (Minimum Surface Preparation Guideline)

**VpCI Super Penetrant**
- ASTM D-971 (Test for Interfacial Tension of Oil against Water)
- ASTM B-117 (Salt Spray)
- ASTM D-1748 (Humidity test)
- NACE RP0487-2000 – Selection of Rust Preventives

**VpCI Teflon Lube**
- ASTM D-566 (Dropping Point of Lubricating Grease)
- ASTM D-217 (Cone Penetration of Lubricating Grease)
- ASTM D-942 (Pressure drop in bar)
- ASTM D-972 (Evaporation Loss of Lubricating Greases and Oils)
- ASTM D-1743 (Rust protection)
- ASTM D-1264 (Water washout)
- ASTM D-2670 (The Falex Pin and Vee Block Test)
- ASTM D-2266 (Four Ball Wear)
- FTNS – 791B (Oil Separation)

**CorrLube VpCI Grease**
- ASTM D-566 (Dropping Point of Lubricating Grease)
- ASTM D-217 (Cone Penetration of Lubricating Grease)
- ASTM D-942 (Pressure drop in bar)
- ASTM D-972 (Evaporation Loss of Lubricating Greases and Oils)
- ASTM D-1743 (Rust protection)
- ASTM D-1264 (Water washout)
- ASTM D-2670 (The Falex Pin and Vee Block Test)
- ASTM D-2266 (Four Ball Wear)
- NACE RP0487-2000 – Selection of Rust Preventives

**VpCI Coolant Antifreeze**
- ASTM D-1384-87 (Standard Test Method for Engine Coolant in Glassware)
VpCI High Performance Coatings

Standard Test Methods below are relevant for:


ASTM B-117 Salt Spray
ASTM D-1748 Humidity
ASTM D-3359 Adhesion
ASTM D-522 Flexibility
ASTM D-532 Gloss
ASTM D-3960 VOC
ASTM D-3363 Pencil Hardness
ASTM D-3363 Pencil Hardness
NACE RP0487-2000 – Selection of Rust Preventives
NACE (Minimum Surface Preparation Guideline)
SSPC (Minimum Surface Preparation Guideline)

VpCI-373 – DOD-P-15328D – Wash Primer Pretreatment

VpCI Surface Preparation Products

VpCI-406

OECD Method 301D – Biodegradability
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip

VpCI-411

ASTM D-6866-11 – Determination of Biobased Content
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
OECD Method 301D – Biodegradability

VpCI-414

ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
OECD Method 301D – Biodegradability

VpCI-415

MIL-PRF-87937, Type IV – Cleaning Compound, Aerospace Equipment
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
40 CFR 796.3100 – Aerobic Aquatic Biodegradation

Updated: 3/1/2016
Boeing D6-17487, Revision P – Exterior and General Cleaners and Liquid Waxes, Polishes and Cleaning Compounds

**VpCI-422/423**
- ASTM F-519 – Mechanical Hydrogen Embrittlement Evaluation of Plating/Coating Processes and Service Environments
- ASTM D-6866-11 – Determination of Biobased Content
- OECD Method 301D – Biodegradability

**VpCI-426 (all versions)**
- NOEC/LOEC – Toxicology Testing

**VpCI-427**
- NOEC/LOEC – Toxicology Testing

**VpCI-428, 429, 432, 433, 434 (both versions)**
- OECD Method 301D – Biodegradability

**VpCI-440**
- ASTM D4627 – Cast Iron Chip Test
- ASTM D1748 – Humidity
- NACE RP0487-2000 – Selection of Rust Preventives

**VpCI Water Treatment Products**

**BioClean 610**
- ASTM D-6866-11 – Determination of Biobased Content

**Cooling Loop Gator**
- EPA/600/4-90/027 F – Requirements for discharge in freshwater
- 48-hour static D. pulex and P. Promelas Toxicity Test

**CorrBlock**
- NACE RP0487-2000 – Selection of Rust Preventives
- NACE TM0208-2000 – Vapor Inhibiting Ability
- MIL-I-22110C – Vapor Inhibiting Ability

**HC 2030, 2050, 2060, 2075, 2090**
- ANSI/NSF Standard 60 – Approved for Drinking Water

**EcoClean Dispersant 600**
- ASTM D-6866-11 – Determination of Biobased Content
- NOEC/LOEC – Toxicology Testing
M-645/VpCI-645
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
NOEC/LOEC – Toxicology Testing

S-69 Powder
EPA/600/4-90/027 F (Methods for Measuring the Acute Toxicity of Whole Effluents to Freshwater and Marine Organisms)
E-17766-01 (48 hour Static renewal toxicity test)
ASTM D-4627 – Cast Iron Chip Test

VpCI-611
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
NOEC/LOEC – Toxicology Testing

VpCI-629/629 SC
NACE TM-01-77 (Protection coefficient)
Wheel Oven Test

VpCI-629 Bio
NACE TM-01-77 (Protection coefficient)
Wheel Oven Test
Emulsion Tendency
Dynamic circuit test
40 CFR 136 (Biodegradability testing)
EPA/600/4-90/027F (Toxicity testing)

VpCI-637/637 GL
NOEC/LOEC – Toxicity Test
NACE ID 182 (Wheel Test)
ASTM G 170-01 (Rotating Cylinder Electrode test)
Methyldiethanolamine Foaming Test

VpCI-639
NACE TM-01-77 (Protection Coefficient)

VpCI-641
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
NOEC/LOEC – Toxicology Testing

VpCI-643
NOEC/LOEC – Toxicology Testing

VpCI-645

Updated: 3/1/2016

Page 12 of 19
ASTM G-31 – Immersion Corrosion Testing
ASTM D4627 – Cast Iron Chip
NOEC/LOEC – Toxicology Testing

VpCI-649 (All versions)
NOEC/LOEC – Toxicology Testing
ASTM D4627 Cast Iron Chip Test
ASTM G-31 – Immersion Corrosion Testing

EcoLine Products

EcoLine 3220
ASTM D-6866-11 – Determination of Biobased Content
ASTM D-1735 – Water Fog
ASTM D-1748 – Humidity
NACE RP0487-2000 – Selection of Rust Preventives

EcoLine 3680
ASTM D-6866-11 – Determination of Biobased Content
ASTM D-1735 – Water Fog
ASTM D-1748 – Humidity Spray
ASTM B-117 – Salt Spray
NACE RP0487-2000 – Selection of Rust Preventives

EcoLine 3690
ASTM D-6866-11 – Determination of Biobased Content
ASTM D-1735 – Water Fog
ASTM D-1748 – Humidity
ASTM B-117 – Salt Fog
NACE RP0487-2000 – Selection of Rust Preventives

EcoLine All Purpose Lubricant
ASTM D-6866-11 – Determination of Biobased Content
ASTM D-1735 – Water Fog
ASTM D-1748 – Humidity Cabinet
ASTM D-4172 – Four Ball Wear Test
ASTM D-2670 – Falex Pin and Vee Block Wear Test
NACE RP0487-2000 – Selection of Rust Preventives

EcoLine Long Term Rust Preventative
ASTM D-6866-11 – Determination of Biobased Content
ASTM D-1735 – Water Fog
ASTM D-1748 – Humidity Cabinet
NACE RP0487-2000 – Selection of Rust Preventives
**EcoLine Heavy Duty Grease**  
ASTM D-6866-11 – Determination of Biobased Content  
ASTM D-1748 – Humidity Cabinet  
NACE RP0487-2000 – Selection of Rust Preventives

**EcoLine Cleaner Degreaser**  
ASTM D-6866-11 – Determination of Biobased Content  
ASTM D-4627 – Cast Iron Chip Test

**EcoLine Cutting Fluid**  
ASTM D-6866-11 – Determination of Biobased Content  
ASTM D-1748 – Humidity Cabinet  
ASTM D-4627 – Cast Iron Chip Test  
ASTM D-2670 – Falex Pin and VEE Block Wear Test

**EcoLine CLP**  
ASTM D-6866-11 – Determination of Biobased Content  
ASTM D-1748 – Humidity Cabinet  
NACE RP0487-2000 – Selection of Rust Preventives

**EcoLine Food Machinery Grease**  
ASTM D-6866-11 – Determination of Biobased Content

**VpCI Additives**

**M-95**  
ASTM G-31 – Immersion Corrosion Testing  
ASTM D4627 – Cast Iron Chip  
NACE TM-0208-2008 – Vapor Inhibiting Ability  
Biodegradability (OECD Method 301D)

**M-370**  
ASTM D1735 – Water Fog Cabinet  
ASTM D-1748 – Humidity Cabinet  
ASTM D-4627 – Cast Iron Chip Test  
ASTM G-31 – Immersion Corrosion Testing

**M-528**  
Biodegradable (OECD Method 301D)  
ASTM D-4172 – 4-ball wear test  
ASTM D-130 – Copper Strip Corrosion  
ASTM D-665 – Rust Preventing Characteristics  
ASTM D-974 – Acid/Base Number by Titration  
ASTM D-1748 – Humidity testing  
ASTM D-2196 – Brookfield Viscometer

Updated: 3/1/2016
M-529, -530, -531

ASTM D-4172 – 4-ball wear test
ASTM D-130 – Copper Strip Corrosion
ASTM D-665 – Rust Preventing Characteristics
ASTM D-974 – Acid/Base Number by Titration
ASTM D-1401 – Water separability testing
ASTM D-1748 – Humidity testing
ASTM D-2196 – Brookfield Viscometer
MIL-PRF-46002 – Contact and Volatile Corrosion Inhibited Oil
MIL-PRF-85062 – VCI Oil for Transmission and Gearbox

M-640L

ASTM D-3306 – Standard specification for glycol based coolant
ASTM D-4627 – Cast Iron Chip Test
ASTM G-31 – Immersion Corrosion Testing

VpCI-705

ASTM D-97 – Pour point
ASTM D-130 – Copper Strip Corrosion
ASTM D-665 – Rust Preventing Characteristics
ASTM D-974 – Acid/Base Number by Titration
ASTM D-1401 – Water separability testing
ASTM D-1748 – Humidity testing
ASTM D-2196 – Brookfield Viscometer
General Motors Part Number 10661800

VpCI Process Additives

CorroLogic VpCI Filler

NACE SP0200-2014 – Steel Cased Pipeline Practices

CorrLube VpCI Motor Oils

API CH-4, CG-4, CF-4
ASTM D-1748 (Humidity testing)
ASTM D-4485 (Ball Rust Test)

S-14 Bio

ASTM D-6866-11 – Determination of Biobased Content
**MCI Products**

**MCI-Architectural Coating**
ASTM B-117 Salt Spray
ASTM D-1748 Humidity

**MCI-Coating for Rebar + NT**
ASTM A944-99 Bond Strength of Steel Reinforcing Bars to Concrete
ASTM B-117 Salt Spray
ASTM D-1748 Humidity

**MCI-CorShield**
ASTM A944-99 Bond Strength of Steel Reinforcing Bars to Concrete

**MCI-CorteCure**
ASTM D6866-11 – Determination of Biobased Content

**MCI-POWR**
Alberta DOT Concrete Sealer Test

**MCI-309**
Penn State Bond and Corrosion Testing
NACE TM0208-2008 – Vapor Inhibiting Ability

**MCI Admixtures (Grenades; Mini Grenades; 2000, 2001, 2006 + NS; 2005 +AL Gel NS )**
ASTM D6866-11 – Determination of Biobased Content (MCI-2005)
ASTM C1582 – Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete
ASTM G109 – Test Method for Determining Effects of Chemical Admixtures on Corrosion of Embedded Steel Reinforcement in Concrete Exposed to Chloride Environments
ASTM C494 - Specification for Chemical Admixtures for Concrete Electrochemical Impedance Spectroscopy (EIS)
NSF Standard 61 – Potable water applications approval

**MCI-2005/MCI-2005 NS**
NSF Standard 61 (Potable water applications approval) by UL
ASTM D-6866-11 – Determination of Biobased Content
CC-022 -- Electrochemical Impedance Testing
MCI-2006/MCI-2006 NS  
NSF Standard 61 (Potable water applications approval) by UL

MCI-2007 Liquid Super Corr  
ASTM C 494 Type G (High range water reducing/retarding admixture requirements)  
Electrochemical Impedance Spectroscopy (EIS)

MCI-2008 Via Corr and Liquid  
EN 12706 – Determination of Flow Characteristics and Self-Healing Properties Electrochemical Impedance Spectroscopy (EIS)

MCI-2012 IntegRepel  
BS 1881-122 - Method for Determination of Water Absorption  
ASTM C403 - Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance  
ASTM C143 - Standard Test Method for Slump of Hydraulic-Cement Concrete  
ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method  
ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens  
Electrochemical Impedance Spectroscopy (EIS)

ASTM E-303 - Measuring Surface Frictional Properties Using the British Pendulum Tester  
ASTM C672 - Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals  
NCHRP 244 Series II Modified (Weight Gain During Saltwater Soak, Water Vapor Transmission, Chloride Ion Intrusion Characteristics)  
NCHRP 244 Series IV (Accelerated Weathering Test)  
Oklahoma DOT Test Procedure OHDL-34 and OHDL-35 (Depth of Sealer Penetration)  
US Bureau of Reclamation M-82 (M0820000.714) – Standard Protocol to Evaluate the Performance of Corrosion Mitigation Technologies in Concrete Repairs

MCI-2020 (all versions)  
NSF Standard 61 – Potable water application (excluding –IPA and Gel versions)
MCI-2021
ASTM C-672 – Method of Test for Scaling Resistance of Concrete Surfaces Exposed to De-Icing Chemicals and Freeze/Thaw

MCI-2022
SS-W-110C – Water absorption reduction
NCHRP 244 Series II – Chloride ion intrusion reduction
EIS – Corrosion Protection to Rebar

MCI-2026 Concrete Primer / MCI-2026 Floor Coating
ASTM D-1464 – Solids by volume
ASTM D-4541 – Bond Strength
ASTM D-2240 – Hardness
ASTM D-2794 – Impact Resistance
ASTM D-4060 – Abrasion Resistance
ASTM D-635 – Flammability
ASTM C-413 – Water absorption
ASTM F-609 – Coefficient of Friction
MIL D-3134F – Indentation
EPA Method 24 – VOC

MCI-2027 Aliphatic Polyurea Coating
ASTM D695 - Compressive Strength
ASTM D412 - Elongation
ASTM D2240 - Hardness
ASTM D1737 - Flexibility
ASTM D968 - Falling Sand Abrasion Resistance
ASTM D4060 - Abrasion Resistance
ASTM D523 – Gloss Measurement
ASTM D7234 – 12 - Pull-Off Adhesion Strength of Coatings on Concrete Chemical Resistance Testing

MCI-2120
NSF Standard 61 (Potable water application) by UL

MCI-2241 + 2242
ASTM D4541 - Pull-Off Strength of Coatings
ASTM D412 - Vulcanized Rubber and Thermoplastic Elastomers – Tension
ASTM D522 - Mandrel Bend Test of Attached Organic Coatings
ASTM D4060 - Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D570 - Water Absorption of Plastics
ASTM E96 - Water Vapor Transmission of Materials
ASTM C1202 - Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration
MCI-2246
ASTM C882 - Bond Strength of Epoxy-Resin Systems Used With Concrete By Slant Shear
ASTM C190 - Tensile Strength of Hydraulic Cement Mortars
ASTM C78 - Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C1202 - Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration

MCI-2311
ASTM C-109 – Compressive Strength
ASTM C-293 – Flexural Strength
ASTM C-496 – Splitting Tensile Strength
ASTM C-469 – Modulus of Elasticity
ASTM C-157 – Length Change
ASTM D-4541 – Direct Tensile Bond

MCI-2701
ASTM C-109 – Compressive Strength
ASTM C-293 – Flexural Strength
ASTM C-496 – Modulus of Elasticity in Compression
ASTM C-157 – Shrinkage
ASTM C-1202 – Rapid Chloride Permeability

MCI-2702
ASTM C-109 – Compressive Strength
ASTM C-293 – Flexural Strength
ASTM C-496 – Modulus of Elasticity in Compression
ASTM C-496 – Splitting Tensile Strength
ASTM C-157 – Shrinkage, Length change
ASTM D-4541 – Direct Tensile Bond