ICL Phosphate Specialty

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PRODUCT APPLICATION GUIDE

HALOX® Corrosion Inhibitors

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Inorganic Corrosion Inhibitors

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 700	Zinc Aluminum Phosphate	pH (10% solution by wt) 5.1 Oil Absorption (lbs/100 lbs) 36 Density (g/ml) 3.09 D50 Horiba (microns) 5-7 D100 Horiba (microns) <20 Hegman Grind 5.5-6.0 % LOI (at 600°C) 9.8	▪ Alkyds ▪ Acrylics ▪ Water Based Epoxies ▪ Solvent 2K Epoxies ▪ Urethanes ▪ Solvent 2K Polyurethanes ▪ Synergist with other HALOX® Organic Corrosion Inhibitors
HALOX® SZP-391	Phosphosilicate Strontium Zinc Phosphosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture ▪ No Hazardous Classification (no dead fish/dead tree)	pH (10% solution by wt.) 7.2 Oil Absorption (lbs/100 lbs) 34.3 Density (g/ml) 3.3 Mean Particle Size (microns) 4.9 Hegman Grind 5.5 % Moisture 1.5 % L.O.I. (450° C) 5.5 % Solubility in water 0.02	**Most effective & efficient corrosion inhibitor** ▪ Solvent Based Alkyds ▪ Water Reducible Epoxies ▪ Latex Emulsions ▪ High Solids Epoxie ▪ Acid Catalyzed Systems ▪ Polyesters ▪ Direct-to-Metal Finishes ▪ Vinylidene Chloride Systems ▪ High Solids Alkyds ▪ Water Reducible Alkyds ▪ Solvent 2K Epoxies ▪ Epoxy Esters ▪ Acrylic Lacquer Emulsions ▪ Thin Film Applications ▪ Gloss Systems
HALOX® SZP-391 JM	Phosphosilicate Strontium Zinc Phosphosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 7.5 Oil Absorption (lbs/100 lbs) 34.0 Density (g/ml) 3.3 Mean Particle Size (microns) 2.0 Hegman Grind <8.0 % Moisture 1.5 % Solubility in water 0.02	**Micronized most effective & efficient corrosion inhibitor** ▪ Thin Film Coatings ▪ Wash (etch) Primer ▪ SB Alkyds ▪ DTM Finishes ▪ SB Epoxy ▪ Aerospace, Auto Refinish ▪ WR Alkyds ▪ Clear Coats ▪ Synergist for HALOX® 550 ▪ High Solids Alkyd ▪ Gloss Coatings ▪ No EU hazardous label ▪ HDG, CRS, HDG, CRS & Galvalume™ ▪ Effective at 50% normal dosage
HALOX® SZP-395	Phosphosilicate Strontium Zinc Phosphosilicate	pH (10% solution by wt.) 7.2 Oil Absorption (lbs/100 lbs) 34.0 Density (g/ml) 3.3 Mean Particle Size (microns) 4.2 Hegman Grind 5.5 % Moisture 1.5 % Solubility in water 0.02	▪ Alkyds (high solids and traditional) ▪ WR Alkyds ▪ Latex ▪ Vinylidene Chloride Latexes ▪ Epoxies ▪ High Acid Value Resins ▪ Catalyzed Baking Systems

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Inorganic Corrosion Inhibitors

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® Zinc Phosphate	Phosphate Zinc Phosphate Pigment	pH (10% solution by wt.) 8.2 Oil Absorption (lbs/100 lbs) 42.0 Density (g/ml) 3.2 Mean Particle Size (microns) 5.0 Hegman Grind 5.5 % Moisture 2.2 % L.O.I. (450° C) 10.0 % Solubility in water 0.02	▪ Short Oil Alkyds ▪ Medium Oil Alkyds ▪ Long Oil Alkyds ▪ Solvent 2K Epoxies ▪ Epoxy Esters ▪ Acid Catalyzed Systems ▪ Polyesters ▪ Vinylidene Chloride ▪ Water Reducible Epoxies ▪ Water Reducible Alkyds ▪ Latex Emulsions ▪ High Solids Epoxies ▪ Water Based Epoxy Esters ▪ Acrylic Lacquer Emulsions ▪ Thin Film Applications
HALOX® Z-PLEX 250	Phosphate Zinc Phosphate Pigment	pH (10% solution by wt.) 7.5 Oil Absorption (lbs/100 lbs) 25 Density (g/ml) 3.3 Mean Particle Size (microns) 5.0 Hegman Grind 6.0A % L.O.I. (600° C) 9.0 % Solubility in water 0.02	▪ Water Based Coatings ▪ Solvent Based Coatings ▪ Powder Coatings
HALOX® Z-PLEX 111	Phosphosilicate Zinc Phosphate Complex ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture ▪ No Hazardous Classification (no dead fish/dead tree)	pH (10% solution by wt.) 8.1 Oil Absorption (lbs/100 lbs) 36.3 Density (g/ml) 3.0 Mean Particle Size (microns) 5.9 Hegman Grind 5.0 % Moisture 0.6 % L.O.I. (450° C) 4.2 % Solubility in water 0.02	▪ Cost Effective Replacement for Zinc Phosphate Standard Commercial Grade
HALOX® Z-PLEX 750	Corrosion Inhibitor Mixture ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 7.2 Oil Absorption (lbs/100 lbs) 27.0 Density (g/ml) 3.0 Mean Particle Size (microns) 5.0 Hegman Grind 5.0 % Moisture 0.8 % Solubility in water 0.02	**Low Zinc, Cost Effective Inorganic-Organic Corrosion Inhibitor** ▪ Latex Emulsions ▪ Solvent Based 2K Epoxies ▪ Hybrids ▪ Chromate-Replacement ▪ High Solids Epoxies ▪ Solvent Based Alkyds ▪ Water Reducible Alkyd (Air Dry)

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Inorganic Corrosion Inhibitors (Zinc-Free)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 430 **U.S. Patent No. 7,481,877**	Calcium Phosphate Ion Scavenging ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 8.0 Oil Absorption (lbs/100 lbs) 45.0 Density (g/ml) 2.7 Mean Particle Size (microns) 4-6 Hegman Grind 4.0 % Moisture 0.5 % Solubility in water 0.02	**Zinc Free & Heavy Metal Free Performance** **Synergistic & Cost Effective Corrosion Inhibitor** ▪ Water Based 2K Epoxies ▪ Solvent Based 2K Epoxies ▪ Hybrids ▪ Water Reducible Alkyds ▪ Water Based 2K Polyurethane ▪ Latex Emulsion ▪ Direct-to-Metal Finishes ▪ High Solids Epoxies ▪ Polyesters
HALOX® 430 JM **U.S. Patent No. 7,481,877**	Calcium Phosphate Ion Scavenging ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 8.0 Oil Absorption (lbs/100 lbs) 50.0 Density (g/ml) 2.7 Mean Particle Size (microns) 2.0 Hegman Grind 6.0+ % Moisture 1.1 % Solubility in water 0.02	**Micronized Zinc Free, Heavy Metal Free** **Synergistic & Cost Effective Corrosion Inhibitor** ▪ Thin Film Coatings ▪ WB 2K Epoxies ▪ SB 2K Epoxies ▪ Hybrids ▪ High Solids Epoxies ▪ Aerospace, Auto Refinish ▪ Cathodic Inhibitor ▪ Clear Coats ▪ Latex Emulsions ▪ WB 2K Polyurethane ▪ Direct-to-Metal Finishes ▪ Polyesters ▪ HDG, CRS, and Al protection ▪ Powder Coatings
HALOX® CW-491	Phosphosilicate Calcium Phosphosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture.	pH (10% solution by wt.) 8.0 Oil Absorption (lbs/100 lbs) 45.9 Density (g/ml) 2.7 Mean Particle Size (microns) 4.3 Hegman Grind 5.0 % Moisture 1.4 % L.O.I. (450° C) 7.0 % Solubility in water 0.02	**Heavy Metal Free Performance** ▪ Short Oil Alkyds ▪ Long Oil Alkyds ▪ Water Reducible Epoxies ▪ Etch Primers ▪ Vinylidene Chloride ▪ Medium Oil Alkyds ▪ Water Reducible Alkyds ▪ Solvent 2K Epoxies ▪ Epoxy Esters ▪ Latex Emulsions
HALOX® SW-111	Phosphosilicate Strontium Phosphosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 7.9 Oil Absorption (lbs/100 lbs) 45.1 Density (g/ml) 2.8 Mean Particle Size (microns) 5.9 Hegman Grind 5.0 % Moisture 0.8 % L.O.I. (450° C) 4.0 % Solubility in water 0.03	▪ Water Based Epoxies ▪ Latex Emulsions ▪ Caulks and Sealants ▪ Water Reducible Alkyds ▪ Solvent 2K Epoxies

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Inorganic Corrosion Inhibitors (Zinc-Free, continued)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® BW-191	Phosphosilicate Barium Phosphosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture.	pH (10% solution by wt.) 8.2 Oil Absorption (lbs/100 lbs) 35.3 Density (g/ml) 3.0 Mean Particle Size (microns) 5.7 Hegman Grind 5.0 % Moisture 0.5 % L.O.I. ((450° C) 3.0 % Solubility in water 0.02	▪ Water Based Latexes ▪ High Solids Coatings ▪ Water Reducible Systems
HALOX® CW-291	Borosilicate Calcium Borosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 10.1 Oil Absorption (lbs/100 lbs) 28.4 Density (g/ml) 2.7 Mean Particle Size (microns) 5.7 Hegman Grind 5.0 % Moisture 0.3 % L.O.I. (450° C) 4.2 Solubility in water 0.3	▪ Medium Oil Alkyds ▪ High Solids Alkyds ▪ Alkyd Gloss Topcoats ▪ Long Oil Alkyds ▪ Epoxy Esters ▪ Direct-to-Metal Finishes
HALOX® CW-2230	Borosilicate Calcium Borosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 10.1 Oil Absorption (lbs/100 lbs) 37.3 Density (g/ml) 2.6 Mean Particle Size (microns) 5.5 Hegman Grind 5.0 % Moisture 0.3 % L.O.I. (450° C) 6.0 % Solubility in water 0.4	▪ Medium Oil Alkyds ▪ Epoxy Esters ▪ Polyurethane ▪ Long Oil Alkyds ▪ Modified Alkyds
HALOX® CW-22/221	Borosilicate Calcium Borosilicate ▪ FDA Compliant ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt.) 10.1 Oil Absorption (lbs/100 lbs) 33.1 Density (g/ml) 2.7 Mean Particle Size (microns) 5.8 Hegman Grind 5.0 % Moisture 0.4 % L.O.I. (450° C) 4.2 % Solubility in water 0.3	▪ Medium Oil Alkyds ▪ Long Oil Alkyds

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Organic Corrosion Inhibitors (Water)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 350	Organic Corrosion Inhibitor Organic Di-Acid Nitrite-Free	pH (10 wt% sol) 3.3 Active solids 97-100% Appearance Slightly yellow powder Density (g/ml) 1.57 Melting point Approx. 170°C (decomposition)	▪ Water Based Protective Coatings ▪ In-Can Corrosion Protection ▪ Improves Adhesion
HALOX® 510 **U.S. Patent No. 7,306,663 B2**	Liquid Organic Corrosion Inhibitor Amino Carboxylate Solution	pH (neat) 9.6 Specific Gravity @25°C 1.0 Density (lbs/gal) 8.7 Density (g/L) 1042 Appearance Clear to Slightly Turbid Color 1 % Solids 25.0 VOC (EPA Meth 24) 0.27 lbs/gal (32.4 g/L)	▪ Long Term Corrosion Inhibitor ▪ High Gloss ▪ Water Based Acrylics ▪ Direct-to-Metal Primerless Topcoats ▪ Can eliminate Flash Rust ▪ Effective on Weld Seams
HALOX® 515 **U.S. Patent No. 7,306,663 B2**	Liquid Organic Corrosion Inhibitor Amino Carboxylate Solution	pH (neat) 8.9 Specific Gravity @25°C 1.06 Density (lbs/gal) 8.8 Density (g/L) 1054 Appearance Clear to Slightly Amber Color 1 % Solids 20.5 VOC (EPA Meth 24) 0.66 lbs/gal (79.2 g/L)	▪ Long Term Corrosion Inhibitor ▪ High Gloss ▪ Water Based Acrylics ▪ Direct-to-Metal Primerless Topcoats ▪ Can eliminate Flash Rust ▪ Effective on Weld Seams
HALOX® 515 LFG **U.S. Patent No. 7,306,663 B2**	Liquid Organic Corrosion Inhibitor Amino Carboxylate Solution **(LOW-FREEZE GRADE)**	pH (neat) 9.7 Specific Gravity @25°C 1.03 Density (lbs/gal) 8.8 Appearance Clear to Slightly Amber Color 1 VOC (EPA Meth 24) 1.88 lbs/gal (226 g/L)	▪ Same as above

Organic Corrosion Inhibitors (Water, continued)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 520	Liquid Organic Corrosion Inhibitor Polymeric Amine Salt	Appearance: Slightly yellow viscous liquid Boiling Point: 64°C (1030 mbar, DSC) Specific Gravity @ 25°C: 0.93 pH (Neat): 9.0 Density (lbs/gal): 7.8	**Dual Functionality as an Adhesion Promoter & Corrosion Inhibitor** ▪ WR Epoxies ▪ 2 Pack Epoxies ▪ 1-2 Pack Polyurethanes ▪ Acrylics ▪ Effective Metal Pretreatment
HALOX® 570	Organic Corrosion Inhibitor Organic Acid Amine Complex	Appearance: White to Light Beige Crystalline Powder Melting Range: 67-63° C Specific Density @20° C: 1.24 g/cm^3 Solubility (g/100g solution @20° C) Isopropanol: ~30 n-Butanol: ~20 Diethylene glycol monomethyl ether: ~40 Methyl-isobutyl-ketone (MIBK): ~15 Xylene: <1 Aliphatic Hydrocarbons (boiling range: 160-200° C): <1 Water (pH=7): <0.25	▪ Water Based Acrylic Latexes ▪ Water Systems ▪ Can eliminate Flash Rust ▪ Co-Polymers ▪ Styrene/Acrylic Latexes ▪ Acrylated Epoxy Esters ▪ 2K Epoxies ▪ Alkyds ▪ Alkyd/Acrylic Blends ▪ 1-2 Pack Polyurethanes ▪ Direct-to-Metal Primerless Topcoats ▪ Some Solvent Based Systems ▪ Effective on Weld Seams ▪ UV Cured Coatings
HALOX® 570 LS	Liquid Organic Corrosion Inhibitor Organic Acid Amine Complex	pH (Neat): 7.8 Specific Gravity @ 25°C: 1.055 Appearance: Clear liquid Color: 1 % Solids (ASTM D 2369): 28.9	▪ Water Based Acrylic Latexes ▪ Water Systems ▪ Can eliminate Flash Rust ▪ Co-Polymers ▪ Styrene/Acrylic Latexes ▪ Acrylated Epoxy Esters ▪ 2K Epoxies ▪ Alkyds & Alkyd/Acrylic Blends ▪ 1-2 Pack Polyurethanes ▪ Direct-to-Metal Primerless Topcoats ▪ Effective on Weld Seams

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Organic Corrosion Inhibitors (Solvent)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 630	Organic Corrosion Inhibitor Alkylammonium Salt Solution	Appearance: Slightly Yellow Solution Dynamic Viscosity @20° C: 160 mPa.s Specific Density @20° C: 0.99 g/cm³ Solubility (g/active substance/ 100g solution @20° C) White Spirit: >50 Isopropanol: >50 n-Butanol: >50 Butylacetate: >50 Methyl-isobutyl-ketone (MIBK): >50 Propyleneglycol Monomethylether: >50 Xylene: >50 Water (pH=7): <0.01	▪ 2 Pack Epoxies ▪ High Solids Epoxy Esters and Alkyds ▪ Acrylic Resins ▪ 2-Pack Polyurethane Primers ▪ Solvent Based Systems
HALOX® 650	Organic Corrosion Inhibitor Organic Di-Acid	Appearance: Slightly Yellow Solution Melting Point: Approx. 170°C decomposition) Specific Density @20° C: 1.52 g/cm³ Solubility (g/active substance/ 100g solution @20° C) Diethylene glycol monomethyl ether: 12 Diethylene glycol monomethyl ether: 26 Isopropanol: 8 1-Methoxy Propylacetate-2: 1 Methyl-isobutyl-ketone (MIBK): 2 Propyleneglycol Monomethylether: 20 Xylene: <0.01 Water (pH=7): <0.01	▪ Coil Coatings/Thermoplastics Acrylics or Epoxies ▪ Powder Coatings/Polyester/TGIC ▪ Acid Catalyzed Thermosetting Systems (Melamine or Urea Formaldehyde) ▪ Wash (Etch) Primers ▪ Solvent Based Systems

Specialty Inhibitors (Liquids)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 550	Liquid Inorganic-Organic Corrosion Inhibitor	pH (neat) 5-8 Specific Density (g/cc) 0.99 Appearance Clear Colorless Liquid % Solubility 100% VOC (EPA Meth 24) 3.71 lbs/gal (445 g/L)	▪ Water Based Coatings ▪ Solvent Based Coatings ▪ Coil Coatings ▪ Conversion Coatings ▪ Semi to High Gloss Coatings ▪ Wash Primers ▪ Thin Films (<1.0 mil) ▪ Anti-fingerprint protection ▪ Reduces black rust on Galvalume® metal
HALOX® 550 WF	Water-Free Liquid Inorganic-Organic Corrosion Inhibitor	pH (neat) 6.5 Specific Density (g/cc) 0.99 Appearance Clear Liquid % Solubility Miscible VOC (EPA Meth 24) 8.17 lbs/gal (979 g/L)	▪ Water Based Coatings (e.g. Water Reducible Alkyds) ▪ Solvent Based Coatings (e.g. Polyurethanes) ▪ Gloss Coatings ▪ Thin Films (< 1.0 mil) ▪ Clear Coats ▪ Anti-fingerprint coatings ▪ Synergist to jet-milled products ▪ Strontium chromate and chromic acid replacement

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Specialty Inhibitors (Liquids, continued)

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® 800 M	Multi-Metal Liquid Corrosion Inhibitor	pH (Neat) 8.5 Specific Gravity (g/ml) 1.23 Density (lbs/gal) 10.25 Appearance Slightly viscous amber liquid** Odor Mild Solubility 100% VOC (EPA Method 24) 0.87 lbs/gal (104 g/L)	▪ Synthetic Coolants ▪ Metal Cleaners ▪ Ferrous and Non-Ferrous Substrates
HALOX® RC-980	Rust Converting Additive	Form/Appearance Liquid/Straw Yellow Freeze Cycle Freeze Stable Lovibond Color 2 Specific Gravity @ 25°C 1.07 pH (neat) 3.5-4.5 Flash Point (PMCC) >218°F	**Converts Red Rust to Black Iron Oxide** **Cost-Effective** ▪ Water Based Latexes ▪ Water Based PVDC ▪ Water Based Vinylidene Chloride Paints ▪ Water Based Coatings ▪ Solvent Based Coatings: Medium Oil Alkyds, Cationic 1K Epoxies, and Cationic 1K Acrylics) ▪ Post-addable

FLASH-X® Flash-Rust Inhibitors

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® FLASH-X® 150	Liquid Flash Rust Inhibitor Liquid Additive ▪ As defined by TSCA, this liquid additive is classified as a mixture.	pH (neat) 9.6 Specific Gravity @ 25°C 1.14 Appearance Clear Liquid Color Light Straw % Solids 24 VOC (EPA Meth 24) 0.85 lbs/gal (102 g/L)	▪ Water Based Protective Coatings ▪ In-Can Corrosion Protection
HALOX® FLASH-X® 330	Nitrite Free Liquid Flash Rust Inhibitor Liquid Additive ▪ As defined by TSCA, this liquid additive is classified as a mixture.	pH (neat) 8.3 Specific Gravity @ 25°C 1.21 Appearance Clear Liquid Color Light Straw % Solids 68 VOC (EPA Meth 24) 1.11 lbs/gal (133 g/L)	▪ Water Based Protective Coatings ▪ Water Jet Blasting and Metal Working Applications

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XTAIN® Tannin Stain Inhibitors

PRODUCT	CLASSIFICATION/ CHEMICAL DESCRIPTION	PHYSICAL PROPERTIES (Typical)	SUGGESTED APPLICATIONS
HALOX® BW-100	Phosphosilicate Barium Phosphosilicate Pigment ▪ As defined by TSCA, this composite pigment is classified as a mixture	pH (10% solution by wt) 7.5 Oil Absorption (lbs/100 lbs) 37.1 Density (g/ml) 2.8 Mean Particle Size (microns) 5.1 Hegman Grind 5.0 % Moisture 0.6 % Solublity in water 0.17	▪ Acrylic Latexes ▪ Vinyl Acrylic Latexes ▪ Styrenated Acrylic Latexes ▪ Solvent Based Alkyds
HALOX® XTAIN® A	Phosphosilicate Aluminum Zirconium Phosphosilicate Pigment ▪ As defined by TSCA, this composite pigment is classified as a mixture.	pH (10% solution by wt.) 10.0 Oil Absorption (lbs/100 lbs) 33.1 Density (g/ml) 3.1 Mean Particle Size (microns) 5.8 Hegman Grind 5.0 % Moisture 0.5 % Solubility in water 0.1	▪ Acrylic Latexes ▪ Vinyl Acrylic Latexes ▪ Styrenated Acrylic Latexes ▪ Solvent Based Alkyds
HALOX® XTAIN® L-44	Liquid Additive ▪ As defined by TSCA, this composite pigment is classified as a mixture.	pH (neat) 9.0 Specific Gravity @25° C 1.3 Appearance Clear Liquid % Solids 30 VOC (EPA Meth 24) 1.26 lbs/gal (151 g/L	▪ Eliminates need for zinc oxide ▪ Versatile ▪ Can post-add to finished products under good agitation ▪ Acrylic Latexes ▪ Vinyl Acrylic Latexes ▪ Styrenated Acrylic Latexes ▪ Solvent Based Alkyds
HALOX® CZ-170	Phosphate Enhanced Zinc Ortho Phosphate Complex ▪ As defined by TSCA, this composite pigment is classified as a mixture.	pH (10% solution by wt.) 8.1 Oil Absorption (lbs/100 lbs) 43.5 Density (g/ml) 3.6 Mean Particle Size (microns) 4.3 Hegman Grind 5.5 % Moisture 1.5 % L.O.I. (450° C) 7.4 % Solubility in water 0.02	▪ Short Oil Alkyds ▪ Medium Oil Alkyds ▪ Long Oil Alkyds ▪ Solvent 2K Epoxies ▪ Epoxy Esters ▪ Acid Catalyzed Systems ▪ Polyesters ▪ Vinylidene Chloride ▪ Water Reducible Epoxies ▪ Water Reducible Alkyds ▪ Latex Emulsions ▪ High Solids Epoxies ▪ Water Based Epoxy Esters ▪ Acrylic Lacquer Emulsions ▪ Thin Film Applications

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