

Features

- Good color and gloss retention
- Two hour dry to touch (@ 70° F)
- Good abrasion resistance
- Standard line of colors
- Unlimited custom tinted colors
- Interior or exterior application

General Properties

This urethane alkyd is superior to conventional alkyds when applied to surfaces that are intermittently exposed to light chemical environments. Provides better color and gloss retention than epoxy esters on exterior exposures. Provides good abrasion resistance on high traffic floor areas. Designed for interior or exterior application on metal, wood or concrete surfaces. Easily applied by brush, roller or various spray methods.

Recommended For:

- Metal & Wood
- Equipment
- Machinery
- Floors
- Marine Exposures (above water)
- Railings
- Catwalks
- Piping
- Doors
- Cabinets
- Storage Tanks
- Metal Buildings
- Conveyers
- Fences
- General Maintenance Painting

Limitations:

- Not for immersion service
- Not for strong acid or chemical exposure
- Not for high abuse floor areas
- Use barrier or tie coat when applying over zinc coated surfaces
- Concrete must be properly primed prior to topcoating

Product Information

Labor Saving Benefits

- Good color and gloss retention which lengthens the coating life
- Good abrasion resistance permits wider application and longer coating life
- Ready mixed line of colors eliminates the need to custom tint all colors
- Available in unlimited custom colors satisfying the most stringent color needs
- Versatile application by brush, roller and various spray methods
- Formulated for application on metal, wood or concrete — interior or exterior

Colors —Standard: M22-15 Safety Yellow M22-65 Safety Orange
M22-21 Safety Red M22-73 Platinum Gray
M22-35 Safety Blue M22-75 Battleship Gray
M22-60 Brown M22-78 Aluminum
M22-64 Bronzetone M22-82 Safety Black

—Tint Bases: *Industrial Tinting Bases:*
M22-90 Tintable White
M22-91 Deep Base
M22-92 Clear Base

BENJAMIN MOORE® COLOR PREVIEW® Bases:
M22-1B M22-2B
M22-3B M22-4B

—Special Colors: Contact your Benjamin Moore & Co. Representative.

Certification:

Master Painters Institute MPI #9, 48.
Formulated without lead, mercury or chromates.
Formulated with non-photochemically reactive solvents.
Does not contain any ozone-depleting substances, either Class I or Class II

Analysis:

(typical — may vary by color)

M22 08-F			
Pigment: 27.9%		Vehicle: 72.1%	
Titanium Dioxide 95.6%		Modified Alkyd Resin 45.6%	
Inert Pigments 4.4%		Solvents and Additives 54.4%	
	100.0%		100.0%

Technical Data

Generic Type	Urethane Alkyd
Pigment Type	Titanium Dioxide
Volume Solids	42%
Theoretical Coverage	340 Sq. Ft. @ 2.0 MILS
Film Thickness – Wet	3.6 – 6 MILS
– Dry	1.5 – 2.5 MILS
Dry Time @ 70° F – To Touch	2 Hours
– To Recoat	8 Hours
Dries By	Oxidation
Dry Heat Resistance	350° F
Viscosity	75 ± 5 KU
Flash Point (Seta)	103° F
60° Specular Gloss	85%
Surface Temperature At Application – Min.	45° F
– Max.	95° F
Surface must be dry and at least 5' above the dew point.	
Reduction – Brush	Do not thin
– Roller	Do not thin
– Spray	Do not thin
Clean Up Thinner	M97 or Mineral Spirits
Mixing Ratio	N/A
Induction Time	N/A
Pot Life @ 70° F	N/A
Weight Per Gallon	9.1 Lbs.
Storage Temperature – Min.	40° F
– Max.	90° F

Safety White

Volatile Organic Compounds (VOC)

Unthinned	Grams/Liter	434
	Lbs./Gal.	3.62

Primer Selection

Technical Information

	Ferrous Metal Hot or Cold Rolled Steel	Walls & Trim Wood, Plaster or Dry Wall	Masonry Walls Poured, Cast or Brick	Block Walls Concrete-Cinder or Lt. Weight
Primer Product Code	M06	284	M04	M88
Generic Type	Alkyd	Vinyl Acrylic	Acrylic	Vinyl Acrylic Block Filler
Pigment Type	Corrosion Inhibitors, Select Inerts	Titanium Dioxide, Select Inerts	Titanium Dioxide, Corrosion Inhibitors	Titanium Dioxide, Select Inerts
Volume Solids	47%	28%	40%	38%
Theoretical Coverage at Recommended Film Thickness	380 sq. ft.	425 sq. ft.	320 sq. ft.	75 sq. ft.
Film Thickness - Wet - Dry	4.2 mils 2.0 mils	3.0 mils 0.8 mils	5.0 mils 2.0 mils	21.3 mils 8.1 mils
Dry Time - To Touch - To Recoat	1 Hour 3-4 Hours	30 Min. 1 Hour	30 Min. 2 Hours	1 Hour 3-4 Hours
Dries By	Oxidation	Coalescence	Coalescence	Coalescence
Dry Heat Resistance	350° F	260° F	260° F	260° F
Viscosity	80 ± 5 KU	100 ± 3 KU	85 ± 5 KU	125 ± 5 KU
Flash Point (Seta)	107° F	None	None	None
60° Specular Gloss	10% max.	10% max.	10% max.	10% max.
Surface Temperature - Min. At Application - Max. <small>Surface must be dry and at least 5° above the dew point.</small>	45° F 95° F	50° F 95° F	50° F 90° F	40° F 120° F
Reducer		Clean Water	Clean Water	Clean Water
Reduction - Brush - Roller - Spray	do not thin do not thin do not thin	not recommended not recommended 10% max.	not recommended not recommended 10%	5% 5% 5%
Clean Up Thinner	M97 or Mineral Spirits	Clean Water	Clean Water	Clean Water
Mixing Ratio	N/A	N/A	N/A	N/A
Induction Time	N/A	N/A	N/A	N/A
Pot Life @ 70° F	N/A	N/A	N/A	N/A
Weight Per Gallon	10.6 lbs.	11.3 lbs.	10.6 lbs.	12.6 lbs.
Storage Temperature - Min. - Max.	40° F 90° F	40° F 95° F	40° F 95° F	40° F 95° F

Note: For additional information regarding primer selection — reference the primer selection chart in the product manual or in the product catalog.

Primer Information

M06

The excellent corrosion resistance and superior adhesion of Alkyd Metal Primer (M06) provide substantial protection for all your interior and exterior maintenance painting projects. Use on tanks, equipment, machinery, conveyors, metal buildings and barges.

284 MOORCRAFT SUPER HIDE® Interior Latex Primer/Undercoater

A vinyl-acrylic latex pigmented wall primer-sealer designed for interior use on new or previously painted drywall, plaster, concrete, nonstaining wood or other porous interior surfaces.

M04

Unique water thinned acrylic primer eliminates flash rusting and protects steel from rust and corrosion. Very low odor and low VOC and virtually no fire hazard make it an excellent choice for food processing plants, commercial and industrial facilities.

M88

High volume solids provide superior filling properties. Designed to fill pores, voids, and surface imperfections of concrete block and other porous masonry surfaces. Use interior and exterior. Very low VOC and low odor plus soap and water clean-up.

Surface Preparation

Previously Painted or Primed Surfaces

Ensure that the surface is clean, dry and free from oil, grease, dirt, salts, and any other contaminants. All blistered and loose paint must be removed. All bare areas must be primed. Glossy surfaces should be roughened before recoating.

WARNING! If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Application Information

This coating may be applied by brush, applicator pad, roller, conventional spray, or airless spray. Care must be taken to achieve the specified wet and dry film thicknesses. Even coats, free from sags, drips, streaks, bubbles, etc., must be obtained.

Application Equipment

Conventional or airless spray, brush or roller. Certain colors may require two coats depending on method of application and color of the primer or intermediate coat.

Conventional Spray

Equipment Recommendations: Binks Model 62 Spray Gun or equivalent.

Fluid Nozzle	Air Nozzle	Atomizing Air Pressure (Measured at gun inlet)	Fluid Pressure
63B (.040")	63PB	45 PSI	25 PSI

Low temperatures or longer hoses require higher pot pressure. Proper atomization is necessary to obtain a smooth finish.

Airless Spray

Equipment Recommendations: Binks Airless 1 Spray Gun or equivalent.

Airless Tip Orifice	Fluid Pressure	Binks Tip No.
.015" - .021"	2,000 - 2,500 PSI	9 - 1560/9 - 2150

CAUTION! Use 100 mesh manifold filter and gun with 100 mesh tip strainer. Use appropriate tip and atomizing pressure for equipment, applicator technique and weather conditions.

Roller

Use a ¼" nap synthetic cover. Do not use medium or long nap roller covers.

Clean Up Instructions

For solvent based coatings, clean all equipment immediately after use with HiFlash Naphtha (M97) or mineral spirits. At the same time, flush out all fluid lines and carefully clean pressure pots. Use clean solvent only. It is also good practice to periodically clean the spray tip or the fluid tip/air cap combination during the course of the working day or shift.

Performance Standards

All test results are for Safety White unless otherwise noted.

Description	Test	Results
Adhesion	ASTM 3359 Cross Cut Tape Test	5B
Abrasion Resistance	ASTM D 4060 C17 Wheels, 1000 gm Load/1000 cycles	170 mg.
Impact Resistance	ASTM D 2794 Gardner Impact, 7 Day Air Dry at 77° F	Direct 40 inch pounds, Reverse 6 inch pounds
Flexibility	ASTM D522 Conical Mandrel Apparatus	28%
Chemical Resistance ASTM D1308 24 Hour Covered Watch Glass Spot Test	5% NaOH	Wrinkled
	5% H ₂ SO ₄	No Effect
	100% Xylene	Slightly Wrinkled
	100% Mineral Spirits	No Effect
Hardness	ASTM D3363 Pencil Hardness 7 Day Cure	2H
Exterior Durability	ASTM G53 Accelerated aging via exposure to fluorescent, ultraviolet, and condensation.	3000 hours
Salt Fog Resistance	ASTM B117	168 Hours—Pass
Immersion	Not recommended	
Hot Water Immersion	Not recommended	

Environmental, Health & Safety Information

WARNING! COMBUSTIBLE LIQUID AND VAPOR! HARMFUL IF INHALED. CAUSES EYE AND SKIN IRRITATION

Contains: stoddard solvent, xylene and aluminum. VAPOR HARMFUL. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. Long-term exposure can cause cancer of the skin, kidneys, or bladder. Long-term overexposure to the solvent can cause liver or kidney damage and embryofetotoxicity. Risk depends on duration and level of exposure.

Aluminum flake will react with water slowly generating hydrogen gas and heat. Care should be taken when opening a previously used container to allow possible built-up pressure to escape (hold down lid with one hand while opening container away from yourself with the other hand).

NOTICE: Repeated and prolonged exposure to solvents may lead to permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are signs that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. To avoid breathing vapors or spray mist, open window and doors or use other means to ensure fresh air entry during application and drying.

Keep away from heat and flame. Use only with adequate ventilation. Do not breathe vapors, spray mist or sanding dust. Do not get in eyes or on skin.

WEAR A PROPERLY FITTED VAPOR/PARTICULATE RESPIRATOR APPROVED BY NIOSH FOR USE WITH PAINTS, eye protection, gloves, and protective clothing during application (or sanding) and until all vapors and spray mist are exhausted. In confined places or in situations where continuous spray operations are typical, or if proper respirator fit is not possible, wear a positive-pressure, supplied air respirator approved by NIOSH. In all cases, follow respirator manufacturer's directions. Do not permit anyone without protection in the painting area. Close container after each use.

FIRST AID: If affected by inhalation of vapors or spray mist, remove to fresh air. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and call a physician, for skin, wash thoroughly with soap and water. In case of ingestion - DO NOT INDUCE VOMITING, get medical help immediately.

IN CASE OF: FIRE – Use foam, CO₂, dry chemical or water fog.

SPILL – Absorb with inert material and dispose of in accordance with applicable regulations.

USE COMPLETELY OR DISPOSE OF PROPERLY. This product contains organic solvents which may cause adverse effects to the environment if handled improperly. Disposal of wastes containing either organic solvents or free-liquids in landfills is prohibited. Dry, empty containers may be recycled in a can recycling program. **Local disposal requirements vary; consult your sanitation department or state-designated environmental agency on disposal options.**

FOR PROFESSIONAL USE ONLY NOT FOR RESIDENTIAL USE KEEP OUT OF REACH OF CHILDREN
 Refer to Material Safety Data Sheet available from your retailer for further safety and handling information.

Warranty & Limitation of Sellers Liability

All statements made on any product label, product manual, product data sheets, technical data charts or specification charts contained herein, are accurate to the best of our knowledge. The products and information are intended for use by persons having skill and know-how in the industry at their own discretion and risk. Benjamin Moore & Co. warrants only that its coatings represented herein meet the formulation standards of Benjamin Moore & Co. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY THE SELLER, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OR LAW, OR OTHERWISE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Workmanship, weather, construction equipment, quality of other materials and other variables affecting the results are beyond our control. No agent, employee or representative of seller has any authority to bind seller to any affirmation, representation or warranty except as stated above.