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PENTA HI GLOSS PAINT

PRODUCT DESCRIPTION: Penta Gloss Paint is a high quality alkyd paint which gives a tough, durable, weather resistant gloss finish with excellent fungus resistance.

RECOMMENDED USES: Interior and exterior wood, metal and masonry surfaces. Also for fibre-building boards, plywood, chipboards, gypsum plaster and wallboard. Suitable for garden tools and equipment, outdoor furniture, etc.

PRODUCT ADVANTAGES

- Durable interior / exterior finish
- Good colour and gloss retention.
- Good flow and leveling
- Good opacity
- Resistant to fungi and algae
- Excellent resistance to scuffing and abrasion
- Resistant to soiling
- Easy to clean

FILM PROPERTIES

Chemical resistance: Resistant to mild chemical fume attack, but where there is heavy attack e.g. actual contact with chemicals, heavy duty/ specialists' coatings will be required. Poor alkali resistance e.g. new 'hot' masonry surface.

Heat Resistance: Generally resistant to heat up to 93°C (200°F) but some discoloration of light colours may occur at temperatures above 82°C (180°F).

Water Resistance: Resistant to the levels of atmospheric humidity present in normal interior and exterior environments, and will withstand repeated and frequent washing. Not suitable for use on immersed surfaces.

SURFACE PREPARATION

NEW AND UNPAINTED: Ensure that surfaces are dry and cleaned free of all dirt, dust, grease, oil, wax, form oils, parting compounds, fungal and algal growth, and other debris and contaminants.

TECHNICIAL DATA

PRODUCT REF:	391-Line
GENERIC TYPE:	Long Oil Alkyd
GLOSS/SHEEN:	Full Gloss
COLOUR RANGE:	White, Black and shelf colours and customer colour matching available on Mixing Scheme.
PACK SZES:	1 US Qt., 1 & 5 US Gal
PRACTICAL COVERAGE:	325-375 f²/gal depending on texture and porosity of surface.
DRYING TIMES:	Touch: 3-4 hours Recoat: 18 hours Hard Dry: Overnight
APPLICATION MATHODS:	Brush, Roller, Conventional Spray and Airless Spray
SPRAY RECOMMENDATIONS:	
Conventional:	Satisfactory through most equipment
Airless:	Typically:
Fluid Pressure:	143 bars (2000 p.s.i.)
Spray Tip:	0.33-0.38 mm (13-15 thou)
Spray Tip Angle:	65°
THINNER	
Brush and Roller:	Penta Thinner 41
Spray:	Penta Thinner 11
THINNING	
Brush and Roller:	Not usually necessary
Conventional Spray:	Up to 1 litre Thinner 11 to 4 litres paint
Airless Spray:	Up to 10% with Thinner 11

CLEAN UP:	PENTAL Thinner 41. Remove paint from skin with good proprietary skin cleanser – do not use thinner, solvents, petrol etc.
Flash Point:	40°C
TYPE OF CURE:	Oxidation

Wood: New wood must be cured, dry and cleaned free of any dirt, oil, grease, exuded resin, soluble salts arising from preservative treatment etc. Fill all cracks, holes, crevices etc. with an appropriate wood putty or filler. Oil-based putties and fillers should not be used over primed wood.

Iron and Steel: For normal exposure remove rust and millscale by hand tool cleaning (SSPC-SP2-82) or power tool cleaning (SSPC-SP3-82) to Swedish Standard St-2. Remove oil, grease etc. by solvent cleaning with Penta Thinner 41 to SSPC-SP1-82. For severe exposure (e.g. marine), blast clean to commercial standard, SSPC-SP6-82.

Aluminum: Thoroughly degrease with Penta Thinner 41.

New Galvanize: Thoroughly degrease to remove oils, grease, waxes etc. by solvent cleaning with Thinner 41 in accordance with SSPC-SP1-82. Remove non-oily soils and dirt by water-washing with scrubbing, using a nylon brush/broom. Partially soluble contaminants and clear water-sensitive chromate coatings may be removed by cleaning with a solution of ammonia or acetic acid, following by thorough rinsing with clean water. Sanding or brush sand blasting may be used to remove silicate and chromate treatments and also to roughen the surface, which is important for ensuring good adhesion.

Weathered Galvanize: Weathering of galvanize for at least 6 months will remove oils and many surface treatments, and provide a finely etched surface suitable for painting. Weathering is unpredictable, and the surface must therefore be thoroughly examined to ensure that the oxidized surface layer is uniform and tightly adherent. Scrub with water and a nylon brush to remove non-oily dirt and any water-soluble zinc salts, and loose, powdery white rust. Cleaning with a dilute solution of ammonia or acetic-acid may also be used to remove partially soluble zinc salts, but this must be followed by very thorough rinsing with clean water. Clean if necessary with Thinner 41, to remove any oily contaminants.

Rusted Galvanize: Derust by mopping the whole surface with Deruster 127 diluted 1:3 with water. Allow to derust for 2 to 3 minutes before rinsing off thoroughly, by hosing down with water. Do not allow Deruster127 to dry off.

Masonry: New cement-based masonry (e.g. concrete, cement-rendering, cement mortar pointing) is not an ideal substrate for oil/alkyd based paints, which are prone to alkali attack and disruption by efflorescence. Thorough curing and drying out is even more critical than for emulsion paints. Allow cement-rendered surface and pointing to cure and dry out for 6 weeks and poured concrete for 12 weeks. Fill surface defects (holes, cracks, crevices, etc.) with an appropriate masonry filler. Level any surface projections and mortar spatters by grinding stoning or scraping. Rake mortar joints cleans. Rub down with rubbing stone/brick to remove loose sand particles.

Fibre-Building Boards: (Softboard, Mediumboard, Hardboard) Sanding is not usually necessary and can damage glossy surfaced hardboards. Fill nail holes and other surface defects with appropriate putty or filler. Oil-based putties and fillers should be used only on primed or sealed surfaces, and water-based on either.

Chipboard: Single layer, open-surface chipboards may require sanding and overall filling with oil or water-based fillers if a high standard of finish is required, but the surface must be primed first with an oil-based primer such as Penta Wood Primer Undercoat.

Gypsum Plaster: New plaster must be allowed to dry out thoroughly. Lime plaster required 30-60 days and other more popular plasters somewhat less. No paint or sealer should be applied if the moisture content exceeds 8%. Plaster nibs should be scraped and sanded smooth. Cracks should be spackled and smoothed.

Gypsum Wallboard: Ensure all surfaces are dry and cleaned free of dirt, dust etc. Do not use linseed oil putty, glazing, patching pencil, caulking compounds or masking tape on surfaces to be painted.

PREVIOUSLY PAINTED: Remove all loose, flaking, peeling and semi-adherent paint, sanding to a feather-edge where necessary to obtain a clean, firm, sound surface. Fill surface defects as for new surfaces. Rub down smooth glossy surfaces. Rub down smooth, glossy surfaces to ensure good adhesion.

TREATMENT OF FUNGUS AND ALGAE INFECTED AREAS: Clean infected areas with a solution of 1 part household bleach in 3 parts water using a sponge and/or brush. Rinse off thoroughly with clean water. This may be repeated in severe cases. Previously infected oil/alkyd-based painted surfaces should then be sealed with 1 coat Penta Acrylic Sealer. Observe manufacturers safety precautions for using household bleach. Wear protective clothing to protect eyes and skin.

Treatment for Efflorescence: This problem appears as white spots or apparent 'bleaching' of unpainted or previously painted masonry surfaces. It is caused by drying-out of new plaster/masonry, rising dampness, or water leaks into walls, which must be rectified before proceeding.

This is a situation which is particularly adverse for oil/alkyd-based paints, particularly gloss paint, unless the cause of efflorescence is eliminated. Loose efflorescence should be removed by vigorous brushing with coarse sacking or dry brush, followed by light rubbing with a damp cloth. This should be repeated at intervals of a week, until it is evident that the efflorescence has ceased. Finally apply 1 coat Penta Acrylic Sealer. If efflorescence is of the smooth, hard type (lime-bloom), it should be lightly abraded to ensure good adhesion.

PRIMING
NEW AND UNPAINTED SURFACES

Wood/Plywood: Prime with 1 coat Penta Wood Primer Undercoat. If the surface is dense, compressed and not very absorbent (e.g. planed wood), thin the primecoat with up to 10% Thinner 41, to assist penetration.

Iron and Steel: Prime with 1 coat Penta Zinc Chromate primer Grey,

Red or Yellow or Red Oxide.

Aluminium: Prime with 1 coat Penta Etch Primer for normal exposure, and for more severe exposure prime with 1 coat Etch Primer and 1 coat Penta Zinc Chromate Primer.

New Galvanize: Apply 1 coat Penta Etch Primer and 1 coat Penta Zinc Chromate Metal Primer.

Weathered or Rusted Galvanize: Apply 1 or 2 coats Penta Zinc Chromate Metal Primer.

Fibre-Building Boards: (Softboard, Mediumboard and Hardboard) Prime with 1 coat Penta Acrylic Sealer.

Fire-retardant treated – (interior and exterior) Prime with 1 coat Penta Acrylic Sealer.

Non-fire retardant treated – Prime with 1 coat Penta Wood Primer Undercoat.

Chipboard (Interior) – Prime with 1 coat Penta Wood Primer Undercoat.

Masonry: Apply Hi Gloss directly.

Gypsum Plaster and Wallboard: Prime with 1 coat Penta Acrylic Sealer.

PREVIOUSLY PAINTED: Apply 1 coat of appropriate primer to bare areas as for new surfaces and build up as necessary.

FINISHING
Interior Areas: Finish with 2-3 coats Penta Hi Gloss Paint.

Exterior Areas: Finish with 2-3 coats Penta Hi Gloss Paint.

HEALTH AND SAFETY INFORMATION

HANDLING PRECAUTIONS

Inhalation: Avoid breathing vapours, spray mist or sanding dust. Work only in conditions of good general ventilation to control environmental vapour concentrations within occupational exposure limits. The minimum volume of air required to reduce the solvent vapour to an acceptable level is 823 cu. metres/litre paint applied. This is based on the % of major solvents present in the paint, and the 8 hour exposure limits given in Health and Safety Executive Guidance Note EH40, 'Occupational Exposure Limits', published by HMSO in the U.K. The paint should be sprayed
under good conditions, in a spray booth or with some local extract ventilation.

The operator should wear a cartridge respirator conforming to BS EN 140:1999, fitted with a vapour particulate cartridge selected, used and maintained in accordance with BS EN 529:2005, or alternatively NIOSH/MSHA approved respirators in accordance with OSHA Standard 29 CFR 1910.134. Advice from the respirator manufacturer/supplier should be obtained as to the specific respirator and cartridge suitable for the circumstances of usage.

Where it is not possible to spray under good conditions i.e. in confined spaces or areas of poor ventilation, wear compressed air fed breathing apparatus conforming to BS EN 14594:2005.

Eye Protection: Avoid contact with eyes. Whenever there is a risk of paint or solvent splashing in eyes, or when spray-applying, wear splash proof goggles to BS EN 167:2002

Skin Protection: Avoid contact with Skin. Impervious clothing, footwear and gloves should be worn, especially when spray applying.

Ingestion: Do not take internally

FLAMMABILITY

Category – Flammable

Flash Point –
45°C

Fire and Explosion Risk: Keep away from heat, sparks and flame. Do not smoke. Vapours may ignite. Extinguish all flames, burners, stoves, heaters and pilot lights and disconnect all electrical motors and appliances before use and until all vapours are gone. When spray-applying in confined or enclosed areas, use portable explosion-proof lighting and ventilating equipment connected to exterior self–contained power source. Non-explosion proof equipment must be placed well away from areas where vapours may collect. Use non-ferrous tools and wear conductive and non-sparking shoes where explosion hazards exist. Do not incinerate closed containers as they may explode when exposed to extreme heat or fire.

Thermal Degradation: Avoid breathing fumes when carrying out any burning or welding operations. Possible products of burning or welding through the dried/cured paint films, include carbon dioxide, carbon monoxide, aliphatic hydrocarbons, acrolein and other aldehydes, phthalic anhydride.

FIRSTAID

Inhalation: If inhalation causes discomfort move to fresh air. Restore and support continuous breathing. Have trained person give oxygen if necessary. If discomfort persists or any breathing difficulty occurs, seek medical attention.

Eye Contact: Flush eyes immediately holding lids apart, with copious amounts of water, continuing for at least 15 minutes. Seek emergency medical attention.

Skin Contact: Remove contaminated clothing. Thoroughly wash skin with soap and water. Use a good proprietary skin cleanser for removing paint. Do not use solvent thinners. If symptoms persist seek medical attention.

Ingestion: Do not give anything by mouth except water. Do not induce vomiting. Obtain emergency medical attention.

STORAGE: Flammable: Store away from heat and sources of ignition. Store below 38°C. No smoking, keep out of reach of children. Keep containers tightly covered and upright when not in use. Do not store by hanging on hooks.

SPILL OR LEAK PROCEDURE: Contain and collect spillage using sand or earth. Do not allow to enter a drain or watercourse. Remove sources of ignition. Ventilate area.

FIRE PRECAUTION: If containers are exposed to fire keep them cool by spraying with water. Extinguishing media – foam and dry agents.

WASTE DISPOSAL: As for normal paint waste.