

APEXIOR® No. 1

Coating For Hot Wet Metal Surfaces

PC 900

- FEATURES**
- THE RECOMMENDED COATING FOR BOILER TUBES AND TIMBER KILNS
 - PERFORMANCE RANGE 95°C TO 370°C
 - SIMPLE ONE PACK SELF PRIMING TOPCOAT
 - IDEAL COATING FOR USE UNDER HOT INSULATION WHEN MOISTURE IS PRESENT

- BENEFITS**
- Air dries, easy to apply
 - Single pack
 - Excellent wettability properties – surface tolerant
 - Easily recoatable
 - Resistant to boiling water/steam to 370°C
 - Increases heat transfer efficiency
 - Outstanding resistance to thermal shock (immersion)
 - Inert to water treatment
 - Prevents corrosion in standby service
 - Prevents scale buildup

USES APEXIOR® No. 1 is a single component, easy to apply air dry coating specifically formulated for the hot waterside corrosion prevention of metal surfaces. It is a coating that excels in severe thermal cyclic immersion service.

APEXIOR® No. 1 is resistant to continuous immersion in boiling water and steam from 95°C to 370°C. It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of any scale buildup in steam generating equipment.

APEXIOR® No. 1 prevents pitting corrosion and stops corrosion that has already begun - except for badly pitted areas. It has outstanding wetting properties and adheres well to power tool cleaned areas.

Equipment coated with APEXIOR® No. 1 will also see an increase in heat transfer efficiency. APEXIOR® No. 1 performs ideally with water treatment in steam generating equipment.

Recommended uses for APEXIOR® No. 1 are steam generating equipment, hot condensate return tanks, de-aerators, hot process tanks, autoclaves, sterilizing equipment, mud and steam drums and steam traps.

SPECIFICATIONS

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION		APPLICATION CONDITIONS			
CLASSIFICATION	Boiler coating				
FINISH	Matt			Min	Max
COLOUR	Black	Air Temp.	10°C	50°C	
		Substrate Temp.	10°C	50°C	
		Relative Humidity		50%	
COMPONENTS	One				
VOLUME SOLIDS	34%				
VOC LEVEL	527 g/L				
FLASH POINT	26°C (SDS)				
POT LIFE	Not applicable				
MIXING RATIO V/V	Single Pack				
THINNER	Mineral Turpentine				
PRODUCT CODE	230-63079 Apexior No. 1				
		COATING THICKNESS (MICRONS)			
			Min	Max	Recommended
		Wet film per coat (µm)	255	300	300
		Dry film per coat (µm)	87	100	100
		SUITABLE SUBSTRATES			
		Abrasive blast cleaned, hand cleaned or power tool cleaned steel.			
		PRIMERS			
		Not applicable			
		APPLICATION METHOD			
		Conventional spray, airless spray or brush			

DRYING CHARACTERISTICS AT 100 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Full Cure	OVERCOAT	
				Min	Max ¹
21° C	50%	6-8 Hours	7 Days	16 Hours	24 Hours

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

¹ Allow equipment to air dry for 7 days before placing equipment into service. Coating must be free of solvents prior to being placed into service.

SPREADING RATE ASSUMING NO LOSSES

3.4 square metres per litre equals 100 µm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

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TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

SURFACE	ENVIRONMENT	PREPARATION GUIDE	SYSTEM	DFT (µm)
STEEL – NEW	Internal	Power tool clean AS1627.2 St 3 or Abrasive blast AS1627.4 Class 2	1 st Coat Apexior® No 1 2 nd Coat Apexior® No 1	100 µm 100 µm

SURFACE PREPARATION	To ensure optimum long-term coating system performance, surfaces must be clean, dry and free from dirt, oil, grease, salts, welding flux, mill scale, rust, oxides, old paint, corrosion products or other foreign matter. Remove all surface imperfections that will induce premature coating system failure. Chip or scrape off weld splatter. Grind down sharp and rough edges, gouges, and pits. Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 38 - 50 microns. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern. If abrasive blasting is not permitted, power tool clean according to AS1627.2 Class 2. Coating performance is proportional to the degree of surface preparation.)			
APPLICATION	Redisperse any settled-out pigments by stirring with a paint paddle followed by thorough mixing to a uniform consistency with an explosion-proof or air-driven power mixer. Do not open containers until ready to use. Keep lid on container when not in use. Do not apply APEXIOR® No. 1 in heavier films than specified since blistering may occur. During application of APEXIOR® No. 1 ventilate area with high volume of air.			
BRUSH/ROLLER	Do not use synthetic bristle brushes. Using the side of the brush, scoop APEXIOR® No. 1 from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.			
CONVENTIONAL SPRAY	Thin up to 200ml/litre with mineral turpentine to aid atomisation. Typical Set-up Graco AirPro: 2.18mm Pressure at Triton 308: 70 - 100 kPa (10 – 15 psi) Pressure at gun: 240 - 275 kPa (35 – 40 psi)			
AIRLESS SPRAY	Standard airless spray equipment such as a Graco 205-591 with a fluid tip of 163-610, or a Graco 208-663 with a fluid tip of 163-315 and an air supply capable of delivering 550-620 kPa (80-90 p.s.i.) at the pump. Thinning is not normally required but up to 100 ml/litre of mineral turps may be added to aid application.			
PRECAUTIONS	This is an industrial product designed for use by experienced Protective Coating applicators. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. Combustible Liquid and Vapour. Keep away from heat, sparks and flame. Vapors may cause flash fire. Do not breathe vapors or spray mist. Avoid contact with eyes, skin and clothing. Use with adequate ventilation during mixing and application. Wear an appropriate, properly fitted organic vapour cartridge-type respirator (NIOSH approved) during and after application unless air monitoring demonstrates vapour mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Wash thoroughly after handling. Wear protective gloves, chemical safety goggles and impervious protective clothing. Use skin cream. In confined spaces use a positive pressure supplied-air respirator (NIOSH approved). Use explosion-proof lights and electrical equipment. Use only nonsparking tools and equipment. Wear conductive and nonsparking footwear. Make certain all electrical equipment is grounded. Observe all safety precautions and follow procedures described in OSHA regulations. Not recommended for hot water tank service with average operating temperature below 93°C, immersion in solvents or acids, or interior of boilers held for long periods in cold, wet layup or standby service. A water immersion temperature of 93°C must be achieved for the coating system to withstand water temperature below 93°C.			
CLEAN UP	Clean all equipment with mineral turpentine immediately after use.			
OVERCOATING	Power tool clean to remove all rust and scale and then wash to remove surface contamination. The surface must be free of oil, grease and other contaminants.			
SAFETY PRECAUTIONS	Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au			
STORAGE	Store as required for a flammable liquid Class 3 in a bonded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times.			
HANDLING	As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.			
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting Regulations.			
FLAMMABILITY	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO ₂ or dry chemical powder. On burning will emit toxic fumes.			
WELDING	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.			

COMPANY INFORMATION

Dulux Protective Coatings a division of

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DuluxGroup (New Zealand) Pty Ltd
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 3.79 litre containers
TRANSPORTATION WEIGHT	1.09 kg/litre
DAANGEROUS GOODS	Class 3 UN 1263

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