Environmental, Health and Safety Contractor Resource Manual

Newport News Shipbuilding

Page 1

Appendix M - Volatile Organic Compound (VOC) Limits for Marine Coatings (NESHAP Paint Categories)

Code	Coating Category	Category Description	VOC Limit in Coating	
			G/L	Lb/ Gal
G1	GENERAL USE	Any coating that is not a specialty coating listed below.	340	2.83
	SPECIALTY COATINGS	Any coating that is manufactured and used for one of the specialized applications described below		
S1	Air flask paint	Any special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance	340	2.83
S2	Antenna paint	Any coating applied to equipment through which electromagnetic signals must pass for reception or transmission.	530	4.42
\$3	Antifoulant paint	Any coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the EPA as a pesticide under the FIFR Act.	400	3.33
S4	Heat Resistant Paint	Any coating that during normal use must withstand a temperature of at least 400 deg F.	420	3.5
S5	High-gloss paint	Any coating that achieves at least 85 percent reflectance on a 60 degree meter when tested by ASTM Method D523.	420	3.5
S 6	High-temperature paint	Any coating that during normal use must withstand a temperature of at least 800F.	500	4.17
S7	Inorganic zinc (high-build) primer	A coating that contains 960 grams per liter (8 pounds per gallon) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance.	340	2.83

AUTHORIZED DOCUMENTS ARE PUBLISHED ONLINE ONLY. VERIFY ANY COPY AGAINST THE ONLINE SYSTEM BEFORE USE.

Environmental, Health and Safety Contractor Resource Manual

Newport News Shipbuilding

Page 2

Code	Coating Category	Category Description	VOC Limit in Coating	
			G/L	Lb/ Gal
S8	Military exterior	Paint or Chemical Agent Resistant Coatings ("CARCII): any exterior topcoat applied to military or U.S. Coast Guard vessels that are subject to specific chemical, biological, and radiological washdown requirements.	340	2.83
S9	Mist coat	Any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to curing.	610	5.08
S10	Navigational aids paint	Any coating applied to Coast Guard buoys or other Coast Guard waterway markers when they are recoated aboard ship at their usage site and immediately returned to the water.	550	4.58
S11	Nonskid paint	Any coating applied to the horizontal surfaces of a marine vessel for the specific purpose of providing slip resistance for personnel, vehicles, or aircraft.	340	2.83
S12	Nuclear paint	Any protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials	420	3.5
S13	Organic zinc paint	Any coating derived from zinc dust incorporated into an organic binder that contains more than 960 grams of elemental zinc per liter (8 pounds per gallon) of coating, as applied, and that is used for the expressed purpose of corrosion protection.	360	3.0
S14	Pretreatment Wash primer	Any coating that contains a minimum of 0.5 percent acid, by mass, and is applied only to bare metal to etch the surface and enhance adhesion of subsequent coatings.	780	6.5
S15	Thermoplastic repair and maint. paint:	Any vinyl, chlorinated rubber, or bituminous resin coating that is applied over the same type of existing coating to perform the partial recoating of any in-use commercial vessel. (This definition does not include coal tar epoxy coatings, which are considered "general use" coatings.)	550	4.58

Copyright © 2020 Huntington Ingalls Industries, Inc. All Rights Reserved Huntington Ingalls Industries Proprietary

AUTHORIZED DOCUMENTS ARE PUBLISHED ONLINE ONLY. VERIFY ANY COPY AGAINST THE ONLINE SYSTEM BEFORE USE.

Environmental, Health and Safety Contractor Resource Manual

Newport News Shipbuilding

Page 3

Code	Coating Category	Category Description	VOC Limit in Coating	
			G/L	Lb/ Gal
S16	Rubber camouflage paint	Any specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.	340	2.83
S17	Sealant for thermal spray aluminum	Any epoxy coating applied to thermal spray aluminum surfaces at a maximum thickness of 1 dry mil.	610	5.08
S18	Special marking paint:	Any coating that is used for safety or identification applications, such as markings on flight decks and ships, numbers.	490	4.08
S19	Specialty interior paint	Any coating used on interior surfaces aboard U.S. military vessels pursuant to a coating specification that requires the coating to meet specified fire retardant and low toxicity requirements, in addition to the other applicable military physical and performance requirements.	340	2.83
S20	Tack coat	Any thin film epoxy coating applied at a maximum thickness of 2 dry mils to prepare an epoxy coating that has dried beyond the time limit specified by the manufacturer for the application of the next coat.	610	5.08
S21	Undersea weapons systems paint	Any coating applied to any component of a weapons system intended to be launched or fired from under the sea.	340	2.83
S22	Weld-through (shop) primer	A coating that provides corrosion protection for steel during inventory, is typically applied at less than 1 mil dry film thickness, does not require removal prior to welding, is temperature resistant (burn back from a weld is less than 1¼ centimeters [½ inch]), and does not normally require removal before applying film-building coatings, including inorganic zinc high-build coatings.	650	5.42