RESISTANCE SELECTION

Chemical Resistance Guide for Marine Epoxy Coating Systems

This guide helps match JDMARINEPAINT epoxy products with marine exposure conditions including seawater, salt spray, hydrocarbons, mineral oil, tank service and industrial atmospheres.

Resistance Matrix

PRODUCT	WATER / SEAWATER	SALT SPRAY	OIL / HYDROCARBON	CHEMICAL RESISTANCE NOTES	RECOMMENDED SERVICE
JDH06-4	High	High	Good	Catalog describes oil-resistant and solvent-resistant performance with excellent zinc-layer protection.	Ship hulls, decks, waterlines, port machinery.
JDH815	High	High	Good	Catalog lists heat resistance, salt spray resistance, adhesion and anti-corrosive properties.	Steel structures, pipelines, port facilities.
JDH816	High	High	Good	Catalog states resistance to seawater, mineral oil and aliphatic hydrocarbon solvents.	Hulls, decks, cargo holds, ballast tank corrosion protection.
JDH817	High	Good	Good	MIO epoxy intermediate paint described as resistant to water, oil and hydrocarbons.	Waterline, superstructures, offshore facilities, bridge steel.
JDH818	Good	Good	Good	Catalog notes oil resistance and solvent resistance for rough surface repair conditions.	Maintenance steel and first anti-rust repair primer.

PRODUCT	WATER / SEAWATER	SALT SPRAY	OIL / HYDROCARBON	CHEMICAL RESISTANCE NOTES	RECOMMENDED SERVICE
JDH819	Good	Good	General	Catalog describes good adhesion, impact resistance, water-proofing, salt spray resistance and compatibility.	Machinery, pipelines, water valves, engineering steel.
JDH836	High	High	Good	High-solids solvent-free epoxy with strong adhesion, abrasion resistance and good corrosion resistance.	Heavy-duty offshore steel, docks, pipelines.
JDH838	Good	Good	General	Flexible adhesion primer for galvanized, aluminum and stainless surfaces in moderate corrosive environments.	Special substrates and difficult-to-roughen surfaces.
JDH912	Very high	Project-specific	High	Solvent-free tank lining with excellent chemical resistance; suitable for potable water, grey water and crude oil tanks.	Tank interiors and industrial protective storage systems.

Selection by Exposure Condition

Seawater Immersion

Use an epoxy primer and tie coat route before antifouling. JDH815 or JDH06-4 can be paired with JDH263 tie coat depending on specification.

Wet / Dry Ballast Cycle

JDH816 and project-specific tank lining systems provide a corrosion-resistant epoxy route for internal marine steel.

Oil and Hydrocarbon Exposure

JDH816 and JDH817 are cataloged with resistance to mineral oil, oil or hydrocarbon conditions.

Heavy-Duty Industrial Atmosphere

JDH836 high-solids epoxy can be used where high film build and long-term barrier protection are required.

Tank Interior Service

JDH912 is the preferred candidate for potable water, grey water, crude oil and storage tanks where lining performance is required.

Special Metal Substrates

JDH838 supports adhesion and corrosion protection on galvanized steel, aluminum and stainless surfaces.

Compatibility Guidance

UNDERCOAT	INTERMEDIATE / TIE COAT	TOPCOAT ROUTE	USE CASE
JDH815 or JDH06-4	JDH263 Epoxy Tie Coat	JD744 or JD753 antifouling paint	Below waterline and underwater hull system.
JDH815 / JDH819 / JDH835	JDH817 MIO tie coat	JD908 or JD918 polyurethane topcoat	Waterline, superstructure and atmospheric steel.
JDH818	JDH817 or compatible epoxy intermediate	Polyurethane or compatible maintenance topcoat	Repair and maintenance steel.
JDH838	Project-specific	Acrylic or polyurethane topcoat	Galvanized, aluminum or stainless steel surfaces.
JDH912	Self or specified lining build	JDH912 or approved lining finish	Tank lining systems.

> Resistance performance depends on film thickness, cure, substrate preparation, exposure temperature, concentration and immersion duration. This guide is not a substitute for chemical immersion testing or project approval.