

PAINTING SPECIFICATIONS STANDARD OF PDVSA 0-201 AND EQUIVALENCES PAINTINGS FLAMUKO CA

System	Rank of temperature °C	Atmosphere	Isolation	observe	Grade of preparation Of surface	Rank of anchor profile	Initial Layer	Layer Intermediate	Layer of Finish	average dry film thickness			
										Layer initial	Layer intermediate	Layer finish	TOTAL
1	-50<T<0	Rural, cost marine and industrial	WITH		NACE 1 /SSPC-SP5	1.5 - 2.0	Inorganic Fund Rich in Zinc			3.0			3.0
FLAMUKO	-50<T<0	Rural, cost marine and industrial	WITH		NACE 1 /SSPC-SP5	1.5 - 2.0	Carbozinc 11			3.0			3.0
2	0<T<65	Rural	WITH OUT		NACE 3 /SSPC-SP6	0.75-1	Alkyd basecoat free of heavy metals	alkyd enamel	Alkyd Enamel Color Code	1.5	1.5	1.5	4.5
FLAMUKO	0<T<65	Rural	WITH OUT		BORN 3 /SSPC-SP6	0.75-1	Fla-10-700	Car-302	Car-302	1.5	1.5	1.5	4.5
3A	65<T<93	Rural	WITH OUT		BORN 1 /SSPC-SP5	1.5 - 2.0	High thickness Epoxy primer		Polyurethane enamel color code	4.0		2.0	6.0
FLAMUKO	65<T<93	Rural	WITH OUT		BORN 1 /SSPC-SP5	1.5 - 2.0	Car-193 Prime		CAR-134	4.0		2.0	6.0
3B	65<T<93	Rural	WITH		BORN 1 /SSPC-SP5	1.5-2.0	Epoxy Fund high thickness		CAR-890	4.0		2.0	6.0
FLAMUKO	65<T<93	Rural	WITH		BORN 1 /SSPC-SP5	1.5-2.0	Car-193 Prime		CAR-890	4.0		2.0	6.0
4A	93<T<175	Rural, cost marine and industrial	WITH OUT		NACE 1 /SSPC-SP5	1.5-2.0	Inorganic Fund Rich in Zinc	silicone alkyd enamel	Enamel Alkyd silicone color code	2.5	1.5	1.5	5.5
FLAMUKO	93<T<175	Rural, cost marine industrial	WITH OUT		BORN 1 /SSPC-SP5	1.5-2.0	Carbozinc 11	Car-1248	Car-1248	2.5	1.5	1.5	5.5

4B	93<T<175	Rural, marine and industrial coast	WITH		BORN 1 /SSPC-SP5	1.0-1.5	Inorganic Fund Rich in Zinc	silicone alkyd enamel	Enamel Siliconized Alkyd without Aluminum	2.5	1.5	1.5	5.5
FLAMUKO	93<T<175	Rural, cost marine eindustri al	WIT H		BORN 1 /SSPC-SP5	1.0-1.5	Carbozinc 11	Car-1248	Car-1248	2.5	1.5	1.5	5.5
4C	93<T<175	Rural, cost marine eindustri al	WIT H		BORN 1 /SSPC-SP5	1.5-2.0	High Temp Phenolic Epoxy		epoxy High PhenolicTemp.	4.0		4.0	8.0
FLAMUKO	93<T<175	Rural, cost marine eindustri al	WIT H		BORN 1 /SSPC-SP5	1.5-2.0	PHENOLINE 187		PHENOLINE 187	4.0		4.0	8.0
5	175<T<400	Rural, marine and industrial coast	WIT HOU T		BORN 1 /SSPC-SP5	1.5-2.0	Inorganic Fund Rich in Zinc	Aluminum SiliconeCure d Amb.	Aluminum Silicone Cured Amb.	2.5	1.0	1.0	4.5
FLAMUKO	175<T<400	Rural, cost marine eindustri al	WIT HOU T		BORN 1 /SSPC-SP5	1.5-2.0	Carbozinc 11	Carboline 4631	Carboline 4631	2.5	1.0	1.0	4.5
6	175<T<538	Rural, marine and industrial coast	WIT H		BORN 1 /SSPC-SP5	1.0 - 1.5	Gray Inorganic Polysiloxane 1000°F		Gray Inorganic Polysiloxane 1000°F	2.0		2.0	4.0
FLAMUKO	175<T<538	Rural, cost marine eindustri al	WIT H		BORN 1 /SSPC-SP5	1.0 - 1.5	N/A		N/A	2.0		2.0	4.0
7	400<T<538	Rural, marine and industrial coast	WIT HOU T		BORN 1 /SSPC-SP5	1.0 - 1.5	Gray Inorganic Polysiloxane 1000°F		Gray Inorganic Polysiloxane 1000°F	2.0		2.0	4.0
FLAMUKO	400<T<538	Rural, cost marine eindustri al	WIT HOU T		BORN 1 /SSPC-SP5	1.0 - 1.5	N/A		N/A	2.0		2.0	4.0
8	538<T<1100	Rural, marine and	With or withoutIsolation		BORN 1 /SSPC-SP5	2.0 -2.5	Gray Inorganic Polysiloxane		Gray Inorganic Polysiloxane	4.0		4.0	8.0

		industrial coast					2000°F		e 2000°F				
FLAMUKO	538<T<1100	Rural, cost marine industrial	With or without isolation		BORN 1 /SSPC-SP5	2.0 -2.5	N/A		N/A	4.0		4.0	8.0
9A	0<<93	Coastal Marine industrial	WIT HOUT	tanks spheres	BORN 1 /SSPC-SP5	1.5 - 2.0	Inorganic Fund Rich in Zinc	High thickness Epoxy primer	Epoxy or polyurethane enamel color code	2.5	4.0	2.0	8.5
FLAMUKO	0<<93	Coastal Marine and industrial	WIT HOUT		itall solid	1.5 - 2.0	Carbozinc 11	Car-193 First	Car-890 / Car 134	2.5	4.0	2.0	8.5
9B	0<T<93	Coastal Marine industrial	WIT HOUT	severe corrosion(SO atmosphere and not	BORN 1 /SSPC-SP5	1.5 - 2.0	Epoxy Fundhigh solid	High thickness Epoxy primer	Epoxy or polyurethane enamel color code	4.0	4.0	2.0	10
FLAMUKO	0<T<93	Coastal Marine and industrial	WIT HOUT		BORN 1 /SSPC-SP5	1.5 - 2.0	Car-193 Prime	car-890	Car-890 / Car 134	4.0	4.0	2.0	10
10	0<T<93	Coastal Marine and industrial	With isolation		BORN 1 /SSPC-SP5	1.5 - 2.0	Inorganic Fund Rich in Zinc	High Epoxy Thickness	Enamel epoxy without Aluminum	2.5	4.0	2.0	8.5
FLAMUKO	0<T<93	Coastal Marine and industrial	With isolation		BORN 1 /SSPC-SP5	1.5 - 2.0	Carbozinc 11	Car-890	Car-890	2.5	4.0	2.0	8.5
eleven		Coastal Marine industrial		Pipe of Galvanized steel	SSPC-SP1 SSPC-SP2	Does not apply	Primer for non-ferrous surfaces Surface tolerant		Enamel Polyurethane Color Code	2.0-4.0		2.0	4.0-6.0
FLAMUKO		Coastal Marine and industrial	With isolation		SSPC-SP1 SSPC-SP2	Does not apply	Car-890		Car-134	2.0-4.0		2.0	4.0-6.0

12	0<T<60	Inside tanks		Internal	BORN 1 /SSPC-SP5	2.0 - 2.5	100% epoxy solid		100% epoxy solid	8		8	16
FLAMUKO	0<T<60	Inside tanks			BORN 1 /SSPC-SP5	2.0 - 2.5	Car-890		Car-890	8		8	16
13	0<T60			Internal	BORN 1 /SSPC-SP5	1.5 - 2.0	Epoxy coating for drinking water		Epoxy coating for drinking water	4.0		4.0	8
FLAMUKO	0<T60				BORN 1 /SSPC-SP5	1.5 - 2.0	car-891		car-891	4.0		4.0	8
14	0<T<93			Internal	BORN 1 /SSPC-SP5	1.5 - 2.0	Phenolic epoxy for tank interior		Phenolic epoxy for tank interior	6.0		6.0	12.0
FLAMUKO	0<T<93				BORN 1 /SSPC-SP5	1.5 - 2.0	Phenoline 1205		Phenoline 1205	6.0		6.0	12.0
fifteen	0<T<60	Coastal Marine and industrial Salpique area		External, specific immersion products	BORN 1 /SSPC-SP5	1.5 - 2.0	80% solids modified epoxy		80% solids modified epoxy	8.0		8.0	16
FLAMUKO	0<T<60	Coastal Marine and industrial Salpique area			BORN 1 /SSPC-SP5	1.5 - 2.0	Car-890		Car-890	8.0		8.0	16
16A	T<288			thermo-indication	BORN 1 /SSPC-SP5	1.5 - 2.0	Inorganic Fund Rich in Zinc	High Temp Indicator Paint	High Temp Indicator Paint	2.5	1.5	1.5	5.5
FLAMUKO	T<288				BORN 1 /SSPC-SP5	1.5 - 2.0	Carbozinc 11	Not available	Not available	2.5	1.5	1.5	5.5
16B	T<204			thermo-indication	BORN 1 /SSPC-SP5	1.5 - 2.0	Inorganic Fund Rich in Zinc	High Temp Indicator Paint	High Temp Indicator Paint	3	1.5	1.5	6
FLAMUKO	T<204				BORN 1 /SSPC-SP5	1.5 - 2.0	Carbozinc 11	Not available	Not available	3.0	1.5	1.5	6.0
17	25<T<93			Ind. Byeffect chemical	SSPC-SP2 PSC-SWP 3		Original from Equipo Linea	Enamel hydrofluoric acid indicator	Enamel hydrofluoric acid indicator	Original from Equipo Linea	1.5	1.5	Original from Equipo Linea +3
FLAMUKO	25<T<93				SSPC-SP2 PSC-SWP 3		Original from Equipo Linea	N/A	N/A	Original from Equipo Linea	1.5	1.5	Original from Equipo Linea +3
18	UP TO 60	Coastal Marine eIndustrial	WithIsolation	Abrasive treatment with aluminum oxide	SSPC-SP 16	0.75-1.0	High Build Epoxy			5.0			5.0

FLAMUKO	UP TO 60	Coastal Marine and Industrial	With Isolation		SSPC-SP 16	0.75-1.0	Car-890			5.0			5.0
18B	UP TO 150	Coastal Marine Industrial	With Isolation	Abrasive treatment with aluminum oxide	SSPC-SP 16	0.75-1.0	Phenolic Epoxy		Phenolic Epoxy	4.0		4.0	8.0
FLAMUKO	UP TO 150	Coastal Marine and Industrial	With Isolation		SSPC-SP 16	0.75-1.0	Phenoline 1205		Phenoline 1205	4.0		4.0	8.0
18C	UP TO 205	Coastal Marine Industrial	With Isolation	Abrasive treatment with aluminum oxide	SSPC-SP 16	0.75-1.0	Phenolic Epoxy		Phenolic Epoxy	4.0		4.0	8.0
FLAMUKO	UP TO 205	Coastal Marine and Industrial	With Isolation		SSPC-SP 16	0.75-1.0	Phenoline 1205		Phenoline 1205	4.0		4.0	8.0
18D	HSTA 540	Coastal Marine Industrial	With Isolation	Abrasive treatment with aluminum oxide	SSPC-SP 16	0.75-1.0	Environmental Curing Silicone. modified silicone		Environmental Cure Silicone	1.5		1.5	3.0
FLAMUKO	HSTA 540	Coastal Marine and Industrial	With Isolation		SSPC-SP 16	0.75-1.0	Carboline 4631		Carboline 4631	1.5		1.5	3.0

PAINTING SPECIFICATIONS STANDARD PDVSA 0-203 AND EQUIVALENTS PAINTS FLAMUKO CA

System	Rank of temperature °C	Atmosphere	Isolation	observe.	degree of preparation Of surface	Rank of anchor profile	Initial Layer	Layer intermediate	Layer of Finish	average dry film thickness				interval of drying time
										Layer initial	Layer intermediate	Layer finish	TOTAL	
M1	-50<T<0	rural coastal marine and industrial	With isolation		SSPC-SP5	1.5-2.0	Inorganic background Rich in Zinc			3.0		3.0	6.0	Does not apply
FLAMUKO	-50<T<0	rural coastal marine and industrial	With isolation		SSPC-SP5	1.5-2.0	Carbozinc 11			3.0		3.0	6.0	Does not apply
m2	0<T<65	Rural	Without isolation		SSPC-SP3SSPC-SP11	Does not apply 1.0	Alkyd Fund free of Heavy Metals		Alkyd enamel color code	1.5	1.5	1.5	4.5	12 to 72
FLAMUKO	0<T<65	Rural	Without isolation		SSPC-SP3SSPC-SP11	Does not apply 1.0	FLA-10-700		CAR-302	1.5	1.5	1.5	4.5	12 to 72
M3A	0<T<93	Rural	Without isolation		SSPC-SP3SSPC-SP11 SSPC-SP12	Does not apply 1.0 Does not apply	Epoxy primer High thickness tolerant of surfaces		Polyurethane enamel Color code	4.0		2.0	6.0	8 to 72
FLAMUKO	0<T<93	Rural	Without isolation		SSPC-SP3 SSPC-SP11 SSPC-SP12	Does not apply 1.0 Does not apply	Car-193		Car-134	4.0		2.0	6.0	8 to 72
M3B	-65<T<93	Rural	With isolation		SSPC-SPEleven SSPC-SP12	1.0 Does not apply	Epoxy primer High thickness tolerant of surfaces		Epoxy enamel without aluminum pigments	4.0		2.0	6.0	8 to 72
FLAMUKO	-65<T<93	Rural	With isolation		SSPC-SPEleven SSPC-SP12	1.0 Does not apply	Car-193		Car-890	4.0		2.0	6.0	8 to 72

M4A	93<T<175	rural coastalmarine and industrial	Without isolation		SSPC-SP 11	1.0	Acrylic enamel applied	acrylic enamelsiliconized	Siliconized acrylic enamel color code	1.5	1.5	1.5	4.5	24 to 48
FLAMUKO	93<T<175	rural coastalmarine and industrial	Without isolation		SSPC-SP 11	1.0	Car-1248	Car-1248	Car-1248	1.5	1.5	1.5	4.5	24 to 48
M4B	93<T<175	rural coastalmarine and industrial	With isolation		SSPC-SP 11	1.0	Acrylic enamel applied	acrylic enamelsiliconized	Siliconized Acrylic Enamel Without Aluminum Pigment	1.5	1.5	1.5	4.5	24 to 48
FLAMUKO	93<T<175	rural coastalmarine and industrial	With isolation		SSPC-SP 11	1.0	Car-1248	Car-1248	Car-1248	1.5	1.5	1.5	4.5	24 to 48
M4C	93<T<175	rural coastalmarine and industrial	With isolation		SSPC-SP 11	1.0	High temperature phenolic epoxy and insulation		High temperature phenolic epoxy and insulation	4.0	0	4.0	8.0	8 to 72
FLAMUKO	93<T<175	rural coastalmarine and industrial	With isolation		SSPC-SP 11	1.0	Carboline - Phenoline 368		Carboline - Phenoline 368	4.0	0	4.0	8.0	8 to 72
M5	175<T<400	rural coastalmarine and industrial	Without isolation		SSPC-SP 11	1.0	Aluminum Silicone Environmental Curing	Aluminum Silicone Environmental Curing	Aluminum Silicone Environmental Curing	1.0	1.0	1.0	3.0	24 to 72
FLAMUKO	175<T<400	rural coastalmarine and industrial	Without isolation		SSPC-SP 11	1.0	Car-4631	Car-4631	Car-4631	1.0	1.0	1.0	3.0	24 to 72
M6	175<T<538	rural coastalmarine and industrial	With isolation		SSPC-SP 11	1.0	Gray Inorganic Polysiloxane 1000°F		Gray Inorganic Polysiloxane 1000°F	2.0		2.0	4.0	2 to 8
M7	400<T<538	rural coastalmarine and industrial	Without isolation		SSPC-SP 11	1.0	Gray Inorganic Polysiloxane 1000°F		Gray Inorganic Polysiloxane 1000°F	2.0		2.0	4.0	2 to 8

M8	538<T<1100	rural coastal marine and industrial	With or without isolation		SSPC-SP 11	1.0	Gray Inorganic Polysiloxane 2000°F		Gray Inorganic Polysiloxane 2000°F	4.0		4.0	8.0	2 to 8
FLAMUKO							Not available		No Available					
M9A	0<T<93	marine coastal industrial	Without isolation		SSPC-SP 3 SSPC-SP 11	Does not apply 1.0	Organic Background Rich in Zinc	High thickness epoxy bottom	Polyurethane enamel Color code	2.5	4.0	2.0	8.5	24 to 72
FLAMUKO	0<T<93	coastal marine industrial	Without isolation		SSPC-SP 3 SSPC-SP 11	Does not apply 1.0	Car-859	Car-193 first	Car-134	2.5	4.0	2.0	8.5	24 to 72
M9B	0<T<93	marine coastal industrial	Without isolation		SSPC-SP 12	Does not apply	High thickness epoxy tolerant of surfaces	High thickness epoxy bottom	Polyurethane enamel Color code	5.0	5.0	2.0	12	24 to 72
FLAMUKO	0<T<93	marine coastal industrial	Without isolation		SSPC-SP 12	Does not apply	Car-890	Car-193 first Car-890	Polyurethane enamel Color code	5.0	5.0	2.0	12	24 to 72
M9C	0<T<93	marine coastal industrial	Without isolation		SSPC-SP1 SSPC-SP2 SSPC-SP12	Does not apply		epoxy background high thickness surface tolerant	Polyurethane enamel Color code		5.0	2.0	7.0	24 to 72
FLAMUKO	0<T<93	coastal marine industrial	Without isolation		SSPC-SP1 SSPC-SP2 SSPC-SP12	Does not apply		Car-890	Car-134		5.0	2.0	7.0	24 to 72
M9D	0<T<93	marine coastal industrial	Without isolation		SSPC-SP1 SSPC-SP2 SSPC-SP12	Does not apply			Polyurethane enamel Color code			2.0	2.0	24 to 72
FLAMUKO	0<T<93	coastal marine industrial	Without isolation		SSPC-SP1 SSPC-SP2 SSPC-SP12	Does not apply			Car-134			2.0	2.0	24 to 72

M10A	0<T<93	marine coastal e industrial	Withsol ation		SSPC-SP 3 SSPC-SP 11	Does not apply 1.0	Organic Background Rich in Zinc	High thickness epoxy bottom	Epoxy Enamel without Aluminum Pigment	2.5	4.0	2.0	8.5	24 to 72
FLAMUKO	0<T<93	coastal marine e industrial	Withsol ation		SSPC-SP 3 SSPC-SP 11	Does not apply 1.0	CAR-859	Car-890	Car-890	2.5	4.0	2.0	8.5	24 to 72
M10B	0<T<93	coastal marine e industrial	Withsol ation		SSPC-SP 11	Does not apply	High Thickness Epoxy Tolerant to Surfaces	High thickness epoxy bottom	Epoxy Enamel without Aluminum Pigment	5.0	5.0	2.0	12.0	24 to 72
FLAMUKO	0<T<93	coastal marine e industrial	Withsol ation		SSPC-SP 11	Does not apply	CAR-890	Car-890	CAR-890	5.0	5.0	2.0	12.0	24 to 72
M11A		coastal marine e industrial			SSPC-SP 2 SSPC-SP 12		Background for non-ferrous surfaces		Polyurethane enamel Color code	2.0		2.0	4	8 to 72
FLAMUKO		coastal marine e industrial			SSPC-SP 2 SSPC-SP 12		Car-890		Car-134	2.0		2.0	4	8 to 72
M11B		coastal marine e industrial			SSPC-SP 2 SSPC-SP 12				Polyurethane enamel Color code			4	4	8 to 72
FLAMUKO		coastal marine e industrial			SSPC-SP 2 SSPC-SP 12				CAR-134			4	4	8 to 72
M12		coastal marine e industrial			SSPC-SP 11	1.0	100% solid epoxy (Specific Zones)		100% solid epoxy	8.0		8.0	16	8 to 72

FLAMUKO		coastal marine industrial			SSPC-SP 11	1.0	CAR-891		CAR-891	8.0		8.0	16	8 to 72
M13	0<T<60				SSPC-SP 11	1.0	epoxy coating for drinking water		epoxy coating for drinking water	4.0		4.0	8.0	24-48
FLAMUKO	0<T<60				SSPC-SP 11	1.0	CAR-891		CAR-891	4.0		4.0	8.0	24-48
M14	0<T<93				SSPC-SP 11	1.0	Phenolic epoxy for tank interior		Phenolic epoxy for tank interior	6.0		6.0	12.0	12-712
FLAMUKO	0<T<93				SSPC-SP 11	1.0	Car - Phenoline 1205		Car - Phenoline 1205	6.0		6.0	12.0	12-712
M15	0<T<60	coastal marine and industrial, splash zone		External products for this system shall be specified for immersion service.	BORN 1 /SSPC-SP5	2.0 - 2.5	Modified Epoxy >80% solids		Modified Epoxy >80% solids	8.0		8.0	16	
FLAMUKO	0<T<60	coastal marine and industrial, splash zone		External products for this system shall be specified for immersion service.	BORN 1 /SSPC-SP5	2.0 - 2.5	CAR-890		CAR-890	8.0		8.0	16	
16A3	T>288			Thermo-indication	NACE 1 / SSPC-SP5	1.5-2.0	Inorganic Fund Rich in Zinc	High temperature indicator paint	Paint high temperature indicator	2.5	1.5	1.5	5.5	
FLAMUKO	T>288			Thermos-indication	NACE 1 / SSPC-SP5	1.5-2.0	Carbozinc 11	N/A	N/A	2.5	1.5	1.5	5.5	
16B	T>204			Thermo-indication	NACE 1 / SSPC-SP5	1.5-2.0	Inorganic Fund Rich in Zinc	High temperature indicator paint	Paint high temperature indicator	2.5	1.5	1.5	6.0	
FLAMUKO	T>288			Thermos-indication	NACE 1 / SSPC-SP5	1.5-2.0	Carbozinc 11	N/A	N/A	2.5	1.5	1.5	6.0	
M17	25<T<93			indication by chemical effect	SSPC-SP 2 PSC-SWP3		original equipment /Line	Enamel Hydrofluoric Acid Indicator	Enamel Hydrofluoric Acid Indicator	original equipment /Line	1.5	1.5	original equipment /Line +3	
FLAMUKO	25<T<93			indication by chemical effect	SSPC-SP 2 PSC-SWP3		original equipment /Line	N/A	N/A	original equipment /Line	1.5	1.5	original equipment /Line +3	

M18A	Up to 60	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	High Build Epoxy			5.0			5.0	
FLAMUKO	Up to 60	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	CAR-890			5.0			5.0	
M18B	up to 150	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Phenolic Epoxy		Phenolic Epoxy	4.0		4.0	8.0	
FLAMUKO	up to 150	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Phenoline 1205		Phenoline 1205	4.0		4.0	8.0	
M18C	up to 205	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Phenolic or novolac epoxy		Phenolic or novolac epoxy	4.0		4.0	8.0	
FLAMUKO	up to 205	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Phenoline 1205		Phenoline 1205	4.0		4.0	8.0	
M18D	Up to 540	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Environmental Cure Silicone Modified Silicone		silicone environmental curing silicone modified	1.5		1.5	3.0	
M18D	Up to 540	marine coastal industrial	Withsolation	Abrasive treatment with aluminum oxide	SSPC-SSP16	0.75 - 1.0	Carboline 4631		Carboline 4631	1.5		1.5	3.0	