

WORLDWIDE SULPHUR LIMITS FOR MARINE FUELS

Effective Date	Sulfur Limit (% m/m)	Product	Operating Area	Engines	Reference
Currently in Place	4.50	In Practice IFO	Global Limit	All Machinery	MARPOL Annex VI
	1.50	IFO / MDO / MGO	Passenger vessels in trade between EU ports	All Machinery	Directive 1999/32/EC as amended by Regulation 1882/2003 and Directive 2005/33 MARPOL Annex VI
Currently in Place	1.50	MGO (DMA)	California waters and 24 NM of the California baseline	All Machinery	CARB (mandatory use of either MGO or MDO with the set maximum sulphur limits to main propulsion engines and boilers)
	0.50	MDO (DMB)		All Machinery	
Currently in Place	0.10	IFO / MDO / MGO (in practice MGO only meets .1 standard at present)	EU inland waterways and at berth > 2 hours	All Machinery except main engine if maneuvering	Directive 1999/32/EC as amended by Regulation 1882/2003 and Directive 2005/33 MARPOL Annex VI
Currently in Place	1.00	IFO / MDO / MGO	Baltic ECA	All Machinery	Revised MARPOL Annex VI adopted by Resolution MEPC.176(58)
			North Sea ECA	All Machinery	
August 1, 2011	1.00	IFO / MDO / MGO	USA / Canada	All Machinery	The amendment to MARPOL Annex VI will enter into force on August 1, 2011 but the ECA status on these sea areas will become applicable on August 1, 2012- within 200 miles of coast
January 1, 2012	3.50	IFO	Global limit	Main Aux	Revised MARPOL Annex VI adopted by Resolution MEPC.176(58)
January 1, 2012	0.10	MGO (DMA) MDO (DMB)	California waters and 24 NM of the California baseline	All Machinery	CARB (mandatory use of either MGO or MDO with the set maximum sulphur limits to all engines)
August 1, 2012	1.00	IFO / MDO / MGO	USA / Canada ECA	All Machinery	ECA enforced - within 200 miles of coast
August 1, 2013**	0.10	IFO / MDO / MGO	Puerto Rico/USVI	All Machinery	ECA enforced approx. 40 miles of coast
January 1, 2015	0.10	IFO / MDO / MGO	USA / Canada ECA	All Machinery	Decreased in line with Baltic / North Sea ECA - within 200 miles of coast
January 1, 2015	0.10	IFO / MDO / MGO	Baltic ECA	All Machinery	Revised MARPOL Annex VI adopted by Resolution MEPC.176(58)
			North Sea ECA	All Machinery	
January 1, 2020	0.50*	IFO / MDO / MGO	Global Limit	All Machinery	Revised MARPOL Annex VI adopted by Resolution MEPC.176(58)

*A review, to be completed by 2018, will establish whether this grade of fuel will be available. If not, this implementation date may change to January 1, 2025

** Subject to final ratification

At this time it is unlikely that IFO with a sulphur content of <0.5% will be available by 2020

MGO: ISO 8217 - DMA and DMX

MDO: ISO 8217 - DMB and DMC

