



Marine ULTIMATE U MFN/A/V

Rolls faced and unfaced

Marine ULTIMATE U MFN/A/V 13 – 36

ULTIMATE mineral wool provides a unique high-performance profile: it combines safety, comfort and ease of handling.



Fire insulation

ULTIMATE provides effective fire resistance, but also very good performance in reaction to fire.



Thermal insulation

Excellent thermal insulation combined with unique efficiency.



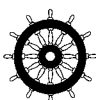
Acoustic insulation

Improved acoustic comfort due to its excellent sound absorption and sound insulation properties.



Light weight

Increase insulation – reduce weight. ULTIMATE combines high fire & thermal performance with very low weight.



Marine ULTIMATE U MFN/A/V 13 – 36

Rolls faced and unfaced



Characteristic	Symbol	Unit	Quantities and measured values								Standard
Application fields	-	-	Thermal insulation, acoustic insulation and fire protection constructions in shipbuilding.								-
Material	-	-	Mineral wool with quality mark RAL by the Gütegemeinschaft Mineralwolle e.V., unrisky regarding health according to German decree on dangerous substances, decree on prohibition of chemicals and to guideline EU 97/69 Nota Q.								-
Thermal conductivities	T	[°C]	0	10	50	100	150	200	250	300	EN 12 667
13 U MFN/A/V	$\lambda_{N,P}$	[W/(m·K)]	0,038	0,039	0,047	0,063	0,080	0,108	-	-	
24 U MFN/A/V	$\lambda_{N,P}$	[W/(m·K)]	0,032	0,033	0,039	0,049	0,062	0,077	0,095	-	
36 U MFN/A/V	$\lambda_{N,P}$	[W/(m·K)]	0,031	0,032	0,038	0,047	0,057	0,070	0,084	0,095	
Behaviour in fire	-	-	Melting point according to DIN 4102, part 17: ≥ 1000 °C. Non combustible according to IMO-Resolution MSC.61(67)-(FTPCode), IMO MSC/Circ. 1120. Homologated for shipbuilding according to EC Type Examination Certificate Nr.: ULTIMATE U MFN 13 – 36 114.478 ULTIMATE U MFA 13 – 36 114.479 ULTIMATE U MFV 13 – 36 114.533								DIN 4102 IMO
Thermal behaviour	-	[°C]	Exposure to temperature up to 400 °C (depends on density) is possible on the unfaced side, but the thickness of the insulating layer has to be correctly dimensioned so that the faced side is exposed to a maximum of 100 °C. From 150 °C on the binder starts to volatilise.								AGI Q 132
Specific thermal capacity	c	[kJ/(kg·K)]	0,84								-
Water vapour diffusion resistance factor	μ	-	~ 1								EN 12086
Air flow resistivity	σ	[KPa·s/m ²]	U MFN 13 : ≥ 5 U MFN 24 : ≥ 12 U MFN 36 : ≥ 15								DIN EN 29053
Chemical behaviour	-	-	Sulphide free.								-
Facing	-	-	The felts U MFA 13 – 36 are one-sided faced with reinforced aluminum foil. The felts U MFV 13 – 36 are one-sided faced with reinforced glass tissue.								-
Miscellaneous	-	-	ISOVER is certified according to DIN EN ISO 9001 and DIN EN ISO 14001.								DIN EN ISO 9001 DIN EN ISO 14001

Delivery form*		
Thicknesses	Width	Thickness
U MFN/A/V 13	1.200	50, 100 mm
U MFN/A/V 24	1.200	30, 40, 50, 60, 80, 100 mm
U MFN/A/V 36	1.200	30, 40, 50, 60, 80, 100 mm

* on some products, minimum order quantities are requested
** further dimensions on request

www.isover-technical-insulation.com

The technical information corresponds to our present state of knowledge and experience at the date of printing (see imprint). But no legal guarantee can be given, unless it has been explicitly agreed. The state of experience and knowledge is developing continuously. Please see to it that you always use the latest edition of this information. The described product applications do not take special circumstances in consideration. Please verify whether our products are appropriate for the concrete application. For further information please contact our Isover sales offices or Isover Dialog. We deliver only according to our terms of trade and terms of delivery.

ISOVER
SAINT-GOBAIN