

# **U Protect Pipe Section Alu2**

Marine & Offshore Insulation

# **U Protect Pipe Section Alu2**

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



#### **Effective Fire Protection**

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



#### **Excellent Thermal insulation**

Excellent thermal insulation combined with unique efficiency.



### **Optimal acoustic performance**

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.



### **Fast Installation**

ISOVER insulation materials are designed for ease and speed of installation











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Characteristic	Symbol	Unit	Quantities and measured values											
Application fields	-	-	For simple and timesaving insulation of pipes of all kinds especially for heating and industrial water lines, distant heating systems as well as pipe lines in construction of power plants and chemical plants.											
Material	-	-	according to Ger	Mineral wool, with RAL-Mark of the Gütegemeinschaft Mineralwolle e.V., exonerated according to German decree on dangerous substances, to German decree on prohibition of chemicals and to guideline EU 97/69 Nota Q.										
	Т	[°C]	50	100	150	200	300							
Thermal conductivities	λ <sub>N,R</sub>	[W/(m•K)]	0,037	0,043	0,052	0,062	0,089	EN 12667						
Maximum service temperature	-	[°C]	620°C											
Behaviour in fire	-	-	Non-combustible, Euroclass A2L-s1,d0 Melting point ≥ 1000°C. Certified for EI90 fire constructions. Non-combustible according to IMO-Resolution MSC.61(67). Homologated for shipbuilding EC Type Examinate Certificate Nr.114.498											
Thermal behaviour	-	[°C]	Maximum service temperature: 660 °C. Insulation layer must be designed so that the coated side is stressed by a maximal temperature of 100 °C. From 150 °C on the binder begins to volatilise.											
Specific thermal capacity	С	[kJ/(kg•K)]	~1											
Chemical behaviour	-	-	Hydrophobic. Silicone-free. Sulphide-free.											
Facing	-	-	Pipe sections are coated outside with high-rupture aluminium foil reinforced with a grid. Diffusion equivalent air layer thickness sd [m] ≥ 200.											
Quality management	-	-	CE-marked according to EN 14303. Quality control according to VDI 2055. Isover has been certified according EN ISO 9001.											
Miscellaneous	-	-	Insulating material identification number: 10.04.03.66.99 EnEV Certificate, registration number 6V099 Z-23.14-1589 CE-marking designation code: T8-ST(+)620-WS1-MV2-CL10 T9-ST(+)620-WS1-MV2-CL10											

Delivery form																					
Thickness (mm)	Outside pipe diameter in mm																				
	15	18	22	28	35	42	45	48	54	57	60	64	70	76	89	102	108	114	133	140	159
20	57,6	50,4	43,2	36,0	30,0	24,0	19,2	19,2	28,8	28,8	27,6	24,0	19,2	19,2	16,8						
30	30,0	28,8	24,0	19,2	19,2	14,4	24,0	24,0	19,2	19,2	19,2	18,0	14,4	14,4	10,8	9,6	9,6	7,2	6,0	6,0	4,8
40			14,4	19,2	10,8	10,8	18,0	9,6	10,8	10,8	10,8	10,8	10,8	10,8	9,6	7,2	7,2	6,0	4,8	4,8	4,8
50					10,8	10,8	10,8	10,8	10,8	10,8	9,6	9,6	9,6	4,8	4,8	6,0	6,0	4,8	4,8	3,6	3,6
60										4,8	4,8	4,8	4,8	6,0	4,8	4,8	4,8	4,8	3,6	1,2	1,2
70												4,8	4,8	4,8	4,8	3,6	3,6	3,6	1,2	1,2	1,2
80														4,8	3,6	1,2	1,2	1,2	1,2	1,2	1,2
100															1,2	1,2	1,2	1,2	1,2	1,2	1,2
120																					1,2

Pipe section with slit on one side, length 1200 mm. Further dimensions on inquiry.

The information shows the running meters per packaging unit, e. g.: 4,8 = 4 pipe sections per packaging unit.



