



*Stone mineral wool pipe insulation*



• DESCRIPTION

**ISOL Shell** is a pipe insulation made of stone mineral wool. The longitudinal distribution of the fibers in the mineral wool ensures stability and strength of the product, as well as optimal insulation performance.

**ISOL Shell** is available in versions with and without reinforced aluminum foil.

The aluminum foil has a self-adhesive strip longwise, ensuring firm attachment of the individual segments of the insulation. Depending on the diameter and thickness, the pipe insulation consists of 1 to 4 longitudinal segments<sup>1</sup>.

Low chloride ion content (< CL10) reduces the risk of corrosion of insulated components.

The maximum operating temperature of the product is up to 450 °C and the melting temperature of the stone wool is >1000 °C.

• APPLICATION

**ISOL Shell** is used as heat, fire, noise and anti-condensation<sup>2</sup> insulation of pipes.

It is widely used in heating, industrial, ventilation, air conditioning, sanitary and other installations.

• ADVANTAGES

- Excellent thermal insulating characteristics
- Fire resistance
- Easy and quick installation
- Long service life
- Reduces noise and vibrations of insulated installations
- Hardness and strength, dimensional stability.
- Low chloride ion content (< Cl10)
- Prevents the formation of condensation<sup>3</sup>
- Water-repellent product
- Recyclable

• TECHNICAL PARAMETERS

Parameter	Value	Standard
Declared thermal conductivity $\lambda_D$ , °C	W/m.K:	EN ISO 8497
10° C	0.034	
50° C	0.037	
100° C	0.044	
150° C	0.053	
250° C	0.058	
400° C	0.081	
500° C	0.090	
Reaction to fire	A1, incombustible (without ALU foil) A2L-s1, incombustible (with ALU foil)	EN 13501-1
Maximum service temperature	max. 450° C	EN 14707
Short-term water absorption	≤ 1 kg/m <sup>2</sup>	EN 13472
Content of chloride ions	< 10 ppm (10 mg/1 kg)	EN 13468
Facing	with and without ALU foil	
<b>Dimensions</b>		
Thickness	20 mm ÷ 100 mm	EN 13467
Inner diameter	ø15 mm ÷ ø356 mm	
Length	1000 mm ± 1 %	

1- The number of segments can be seen in the table with dimensions. 2- Insulation with ALU foil. 3- In the case of the ALU foil version.

**ISOL Shell - pipe sections with and without ALU facing**

Inner diameter	Inner diameter	Box dimensions	Numb. of segments	Lm/ box	Weight kg/ box		Box dimensions	Numb. of segments	Lm/ box	Weight kg/ box		Box dimensions	Numb. of segments	Lm/ box	Weight kg/ box		Box dimensions	Numb. of segments	Lm/ box	Weight kg/ box		Box dimensions	Numb. of segments	Lm/ box	Weight kg/ box																														
					With foil	Without foil				With foil	Without foil				With foil	Without foil				With foil	Without foil				With foil	Without foil																													
inch	mm	6					6					6					6					6																																	
3/8	15	20 mm	1	45	8.87	7.91	30 mm	1	28	10.27	9.50	40 mm	1	17	9.97	9.39	50 mm	1	10	8.57	8.16	60 mm	1	16	18.83	18.09	80 mm	1	9	18.81	18.27	100 mm	2	5	16.35	15.95																			
18	45				9.59	8.59				24	9.37				8.68	21				8.69	8.07				11	7.82				7.41	10				7.73	7.34	9	7.10	6.73	8	7.10	6.73	12	17.44	16.82	14	19.06	18.36	8	17.70	17.20	5	17.11	16.70	
1/2	22				36	8.25				7.42	18				8.30	7.73				14	8.69				8.07	11				7.82	7.41				10	7.73	7.34	9	7.10	6.73	8	7.10	6.73	12	17.44	16.82	14	19.06	18.36	8	17.70	17.20	5	17.11	16.70
3/4	28				32	8.36				7.56	18				8.30	7.73				14	8.69				8.07	11				7.82	7.41				10	7.73	7.34	9	7.10	6.73	8	7.10	6.73	12	17.44	16.82	14	19.06	18.36	8	17.70	17.20	5	17.11	16.70
1	35				24	7.04				6.39	17				8.64	8.07				17	8.64				8.07	17				8.64	8.07				17	8.64	8.07	17	8.64	8.07	17	8.64	8.07	12	15.92	15.37	10	15.92	15.37	6	15.11	14.71	4	15.21	14.87
1 1/4	42				21	7.17				6.54	12				6.94	6.51				12	6.94				6.51	12				6.94	6.51				12	6.94	6.51	12	6.94	6.51	12	6.94	6.51	10	15.92	15.37	8	15.92	15.37	6	15.11	14.71	4	15.21	14.87
1 1/2	48				18	6.72				6.15	11				6.88	6.47				11	6.88				6.47	11				6.88	6.47				11	6.88	6.47	11	6.88	6.47	11	6.88	6.47	10	15.92	15.37	8	15.92	15.37	6	15.11	14.71	4	15.21	14.87
2	60				17	6.89				6.32	10				6.73	6.33				10	6.73				6.33	10				6.73	6.33				10	6.73	6.33	10	6.73	6.33	10	6.73	6.33	9	15.92	15.37	7	15.92	15.37	5	14.45	14.07	3	16.44	16.08
2 1/2	76				20	10.45				9.65	16				13.53	12.78				16	13.53				12.78	16				13.53	12.78				16	13.53	12.78	16	13.53	12.78	16	13.53	12.78	14	16.92	16.40	12	16.92	16.40	10	16.09	15.67	8	18.06	17.68
3	89				16	9.47				8.76	12				11.37	10.76				12	11.37				10.76	12				11.37	10.76				12	11.37	10.76	12	11.37	10.76	12	11.37	10.76	12	16.92	16.40	10	16.92	16.40	8	16.09	15.67	6	17.41	16.98
3 1/4	108	12	8.32	7.72	10	10.97	10.40	10	10.97	10.40	10	10.97	10.40	10	10.97	10.40	10	10.97	10.40	10	10.97	10.40	10	16.92	16.40	8	16.92	16.40	6	16.09	15.67	4	15.48	15.11																					
4	114	9	10.29	9.77	9	10.29	9.77	9	10.29	9.77	9	10.29	9.77	9	10.29	9.77	9	10.29	9.77	9	10.29	9.77	8	16.92	16.40	6	16.92	16.40	4	15.97	15.59	3	16.45	16.13																					
5	140	8	11.72	11.25	8	11.72	11.25	8	11.72	11.25	8	11.72	11.25	8	11.72	11.25	8	11.72	11.25	8	11.72	11.25	8	16.92	16.40	6	16.92	16.40	4	14.40	14.07	3	16.90	16.58																					
6	168	7	9.97	9.47	7	9.97	9.47	7	9.97	9.47	7	9.97	9.47	7	9.97	9.47	7	9.97	9.47	7	9.97	9.47	7	16.92	16.40	5	16.92	16.40	4	14.52	14.09	3	17.44	17.11																					
8	219	6	10.34	9.83	6	10.34	9.83	6	10.34	9.83	6	10.34	9.83	6	10.34	9.83	6	10.34	9.83	6	10.34	9.83	6	16.92	16.40	4	16.92	16.40	3	14.98	14.56	2	17.90	17.56																					
10	273	5	8.09	7.69	5	8.09	7.69	5	8.09	7.69	5	8.09	7.69	5	8.09	7.69	5	8.09	7.69	5	8.09	7.69	5	16.92	16.40	4	16.92	16.40	3	13.14	12.84	2	17.90	17.56																					
12	324	4	10.51	9.99	4	10.51	9.99	4	10.51	9.99	4	10.51	9.99	4	10.51	9.99	4	10.51	9.99	4	10.51	9.99	4	16.92	16.40	3	16.92	16.40	2	13.57	13.26	2	21.2	20.77																					
15	381	3	11.00	10.44	3	11.00	10.44	3	11.00	10.44	3	11.00	10.44	3	11.00	10.44	3	11.00	10.44	3	11.00	10.44	3	16.92	16.40	2	16.92	16.40	2	14.73	14.41	2	22.3	21.87																					
20	508	2	10.86	10.44	2	10.86	10.44	2	10.86	10.44	2	10.86	10.44	2	10.86	10.44	2	10.86	10.44	2	10.86	10.44	2	16.92	16.40	2	16.92	16.40	2	15.30	14.95	2	23.7	23.26																					
25	635	2	9.11	8.67	2	9.11	8.67	2	9.11	8.67	2	9.11	8.67	2	9.11	8.67	2	9.11	8.67	2	9.11	8.67	2	16.92	16.40	2	16.92	16.40	2	13.75	13.40	2	24.8	24.36																					
30	762	2	9.86	9.38	2	9.86	9.38	2	9.86	9.38	2	9.86	9.38	2	9.86	9.38	2	9.86	9.38	2	9.86	9.38	2	16.92	16.40	2	16.92	16.40	2	14.87	14.54	2	25.3	24.97																					
35	889	3	12.58	11.96	3	12.58	11.96	3	12.58	11.96	3	12.58	11.96	3	12.58	11.96	3	12.58	11.96	3	12.58	11.96	3	16.92	16.40	2	16.92	16.40	2	15.36	15.02	2	26.3	25.97																					
40	1016	3	13.60	12.92	3	13.60	12.92	3	13.60	12.92	3	13.60	12.92	3	13.60	12.92	3	13.60	12.92	3	13.60	12.92	3	16.92	16.40	2	16.92	16.40	2	15.36	15.02	2	27.3	26.97																					
45	1143	3	12.80	11.62	3	12.80	11.62	3	12.80	11.62	3	12.80	11.62	3	12.80	11.62	3	12.80	11.62	3	12.80	11.62	3	16.92	16.40	2	16.92	16.40	2	15.36	15.02	2	28.3	27.97																					
50	1270	3	12.13	11.57	3	12.13	11.57	3	12.13	11.57	3	12.13	11.57	3	12.13	11.57	3	12.13	11.57	3	12.13	11.57	3	16.92	16.40	2	16.92	16.40	2	15.36	15.02	2	29.3	28.97																					
55	1397	3	12.00	11.45	3	12.00	11.45	3	12.00	11.45	3	12.00	11.45	3	12.00	11.45	3	12.00	11.45	3	12.00	11.45	3	16.92	16.40	2	16.92	16.40	2	15.36	15.02	2	30.3	29.97																					
60	1524	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	31.3	30.87																					
65	1651	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	32.3	31.87																					
70	1778	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	33.3	32.87																					
75	1905	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	34.3	33.87																					
80	2032	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	35.3	34.87																					
85	2159	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	36.3	35.87																					
90	2286	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	37.3	36.87																					
95	2413	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	11.81	11.38	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	38.3	37.87																					
100	2540	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	12.66	12.18	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	39.3	38.87																					
105	2667	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	12.21	11.76	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	40.3	39.87																					
110	2794	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	15.15	14.57	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	41.3	40.87																					
115	2921	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.34	15.73	4	16.92	16.40	3	16.92	16.40	3	16.74	16.23	3	42.3	41.87																					
120	3048	4	11.81	11.38																																																			



**chemical  
products**  
insulation solutions

7B, Sokol Str., Yambol 8600, P.O.Box. 64, Bulgaria  
Tel./fax: +359/ 46 663 335; 46 663 835  
E-mail: [office@chemprod.eu](mailto:office@chemprod.eu)  
[www.chemprod.eu](http://www.chemprod.eu)

The company is  
ISO 9001  
ISO 14001  
ISO 45001 certified.