

## Rolls, Sheets and Shapes



## BU-TYLENE ALU SOUND | T 255 | T 143 I

Sealing & Adhesive  
Products

### Butyl Vibration Damping Membranes, Sheets and Shapes

**This family of products consists of different kinds of self-adhesive membranes, sheets and shapes available in various weights, thicknesses and compound formulations. They are protected by different thick press-stressed aluminium films, they have been designed to damp vibrations and are applied in automotive, housing and white goods fields.**

#### DESCRIPTION

The Bu-tylene ALU SOUND are self-adhesive anti-vibration membranes made of a viscoelastic butyl rubber compound, self-protected by a thick aluminium film of 100 or 150 µm. The Bu-tylene ALU SOUND is available in three different configurations: rolls, flat sheets and taylor made shapes.

#### USES

The Bu-tylene ALU SOUND can be used in a wide range of applications in which equipments or machines mechanically move or vibrate or in which materials transmit these vibrations and emit noise.

This effect has to be avoided or to be reduced.

The specificity of these membranes is to absorb the vibrations and dissipate them into heat.

These membranes can be applied in stamping, fabrication and body assembly operations and can be used in horizontal, vertical & inverted applications.

Compatible with metal sheets, plastic laminates, car bodies and compartments.

#### FEATURES OF THE COMPOUND

The Bu-tylene ALU SOUND are considerably lighter than traditional products.

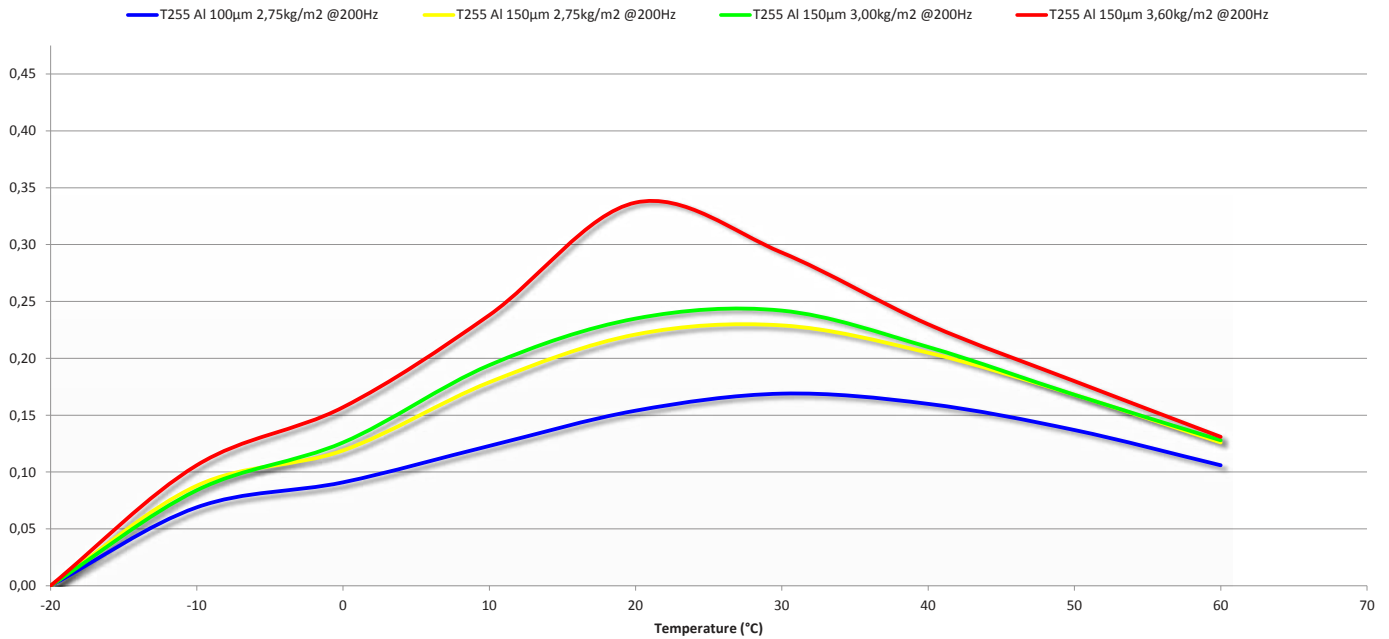
They offer the best balance between thickness, weight and damping performances.

#### FEATURES

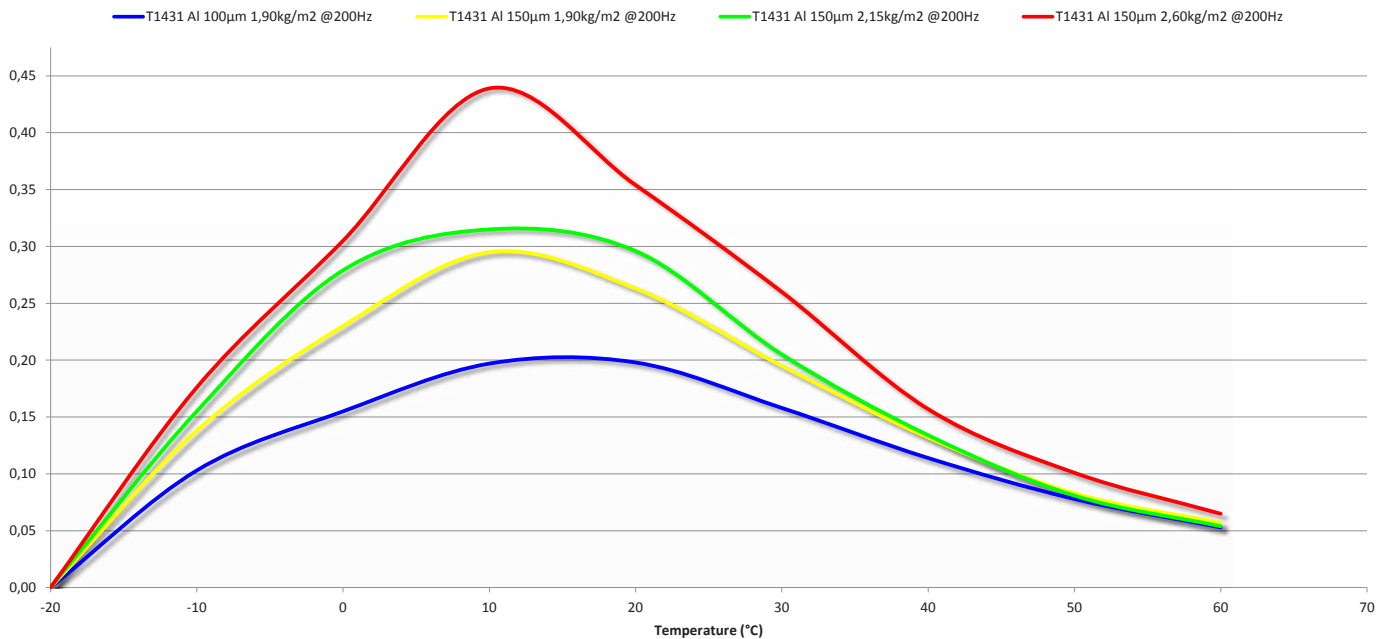
- Damping vibrations;
- Rolls, Flat sheets and Taylor Made Shapes available;
- Cold Applied;
- Excellent adhesive properties at low temperatures;
- Resistant to tear, ageing and UV rays;
- Excellent heat stability;
- Easy peel;
- No oil migration;
- Solvent-free.



#### T 255 - Composite Loss Factor $\eta$ @ 200Hz ASTM E756 (OBERST BAR)



#### T 1431 - Composite Loss Factor $\eta$ @ 200Hz ASTM E756 (OBERST BAR)



#### DIMENSIONS AND PACKAGING

##### ROLL CONFIGURATION

- Standard lengths: 5 / 10 m \*
- Standard thicknesses: 1.6 / 1.8 / 2.2 mm \*
- Standard widths: 10 / 20 / 50 / 100 cm \*
- Other lengths and thicknesses are available on request.

##### FLAT SHEET CONFIGURATION

- Standard lengths: 1 m.
- Standard thicknesses: 1.6 / 1.8 / 2.2 mm \*
- Standard widths: 1 m.

##### TAYLOR MADE SHAPE CONFIGURATION

Bu-tylene ALU SOUND can be engineered and supplied in almost every shape following the customer specifications.

The tailored shapes are obtained from flat sheets of Bu-tylene ALU SOUND.

#### SURFACE PREPARATION

The product must be applied to a clean, dry, smooth and dust-free surface.  
No special tools are required to install.

#### APPLICATION

Start removing the release liner that covers the adhesive part and position the product.  
The recommended pressure for the application is between 5 and 15 g / cm<sup>2</sup>. Press with a roller or a cloth pad.

# BU-TYLENE ALU SOUND

## T 255 | T 143 I



### TECHNICAL DATA

CHARACTERISTICS	VALUE			TEST
Film Type / Colour	Aluminium - Aluminium			
Compound Type/ Colour	<b>T 255</b> Butyl Rubber Adhesive / Grey			
Solids	100 %			-
Product Version	<b>Alu 100 µm</b> <b>2.75 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>2.75 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>3.00 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>3.60 kg/m<sup>2</sup></b>
Aluminium Thickness	100 µm	150 µm	150 µm	150 µm
Thickness	1.6 mm	1.6 mm	1.8 mm	2.2 mm *
Weight	2.75 kg/m <sup>2</sup>	2.75 kg/m <sup>2</sup>	3.0 kg/m <sup>2</sup>	3.6 kg/m <sup>2</sup>
Density	1.60 g/cm <sup>3</sup>			ASTM D 792
180° Peel Adhesion	20 N/cm			ASTM D 1000
Probe Tack	9.0 N			ASTM D 2979
Vertical Flow	0 mm			ISO 7390
Application Temperature Range	+ 5 °C / + 40 °C			-

#### TEST REPORTS

Fire Rating Classification: M1, test by SAFRAN - HERAKLES N° I8691-15.

Smoke Index: F0 (NFF I6-101).

CHARACTERISTICS	VALUE			TEST
Film Type / Colour	Aluminium - Aluminium			
Compound Type/ Colour	<b>T 143 I</b> Butyl Rubber Adhesive / Black			
Solids	100 %			-
Product Version	<b>Alu 100 µm</b> <b>1.90 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>1.90 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>2.15 kg/m<sup>2</sup></b>	<b>Alu 150 µm</b> <b>2.60 kg/m<sup>2</sup></b>
Aluminium Thickness	100 µm	150 µm	150 µm	150 µm
Thickness	1.6 mm	1.6 mm	1.8 mm	2.2 mm
Weight	1.90 kg/m <sup>2</sup>	1.90 kg/m <sup>2</sup>	2.15 kg/m <sup>2</sup>	2.60 kg/m <sup>2</sup>
Density	1.10 g / cm <sup>3</sup>			ASTM D792
180° Peel Adhesion	13 N/cm			ASTM D1000
Probe Tack	6.0 N			ASTM D2979
Vertical Flow	0 mm			ISO 7390
Application Temperature Range	+ 5 °C / + 40 °C			-

# BU-TYLENE ALU SOUND T 255 | T 143 I

## FEATURES



### STORAGE

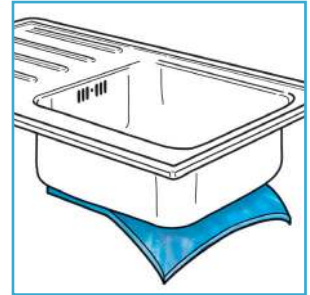
The quality and the characteristics of the materials remain unaltered for a long period of time.

However, it is recommended to use the product within 12 months from production date.

The product must be stored in the original and unopened packaging in a dry and well ventilated place at a temperature between + 5 °C and + 40 °C.

Storage above 50 °C may lead to difficulties in removing the release liner when applying.

The product is not affected by frost.



### TYPES OF USE

The need of vibrations damping is an issue in several industrial sectors:

- Automotive industry: cars, caravans, trucks, commercial vehicles, etc.;
- Shipping industry;
- White goods: household electrical appliances such as washing machines, dryers, refrigerators, freezers, etc.;
- HVAC: residential, commercial buildings or industrial air conditioning systems;
- Construction: wall cladding, etc.

In the Automotive industry the use of a self-adhesive butyl membrane as an anti-vibrant element of the bodywork, improves quality, reduces costs and guarantees a reduction of the fuel consumption and of the CO<sub>2</sub> emissions.

In the Construction industry, possible applications are on metal surfaces of windows sills and wall cladding composite panels for the reduction of the structure-borne vibrations and of the external impacts due to rain drops and hail stones.



THE MATERIALS ARE NOT HAZARDOUS FOR NORMAL USES AND WHEN USED BY SKILLED PERSONS, IN PARTICULAR CONDITIONS, IT IS POSSIBLE TO CUT OR INJURE ONESELF. KEEP OUT OF REACH OF CHILDREN. FOR FURTHER INFORMATION REFER TO THE SAFETY DATA SHEET. THE MANUFACTURER LIMITS HIS LIABILITY TO THE USES AND APPLICATIONS DESCRIBED IN THIS DOCUMENT. BITUMEN AND BUTYL SEALANTS ARE DEFORMABLE PLASTIC PRODUCTS. DO NOT USE FOR PERMANENT FIXINGS OR IN LOAD BEARING APPLICATIONS INSTEAD OF A MECHANICAL FIXING. BITUMEN AND BUTYL ADHESIVES ARE SENSITIVE TO SOLVENTS. THE USER SHOULD PREVIOUSLY CHECK THE COMPATIBILITY OF THE PRODUCT WITH THE SURFACE IN TERMS OF ADHESION, CHEMICAL COMPATIBILITY AND STANDING OVER THE APPLICATION TEMPERATURE RANGE. THE FIGURES SHOWN ON THIS PRODUCT LEAFLET CAN VARY WITHIN A TOLERANCE OF +/-5%. THE MANUFACTURER RESERVES THE RIGHT TO CHANGE PRODUCT CHARACTERISTICS AT ANY TIME WITHOUT PRIOR NOTICE.

\* The product dimensions may vary within defined ranges because of the product characteristics and its manufacturing process. For further information please visit [www.isoltemagroup.com](http://www.isoltemagroup.com)

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