

## DATA SHEET – POLYMAX ABSORB

### Polymax Absorb:

- Thermally bonded polyester fibre insulation specifically designed to provide high performance acoustic absorption across a broad range of frequencies.
- Made in a range of densities – LD (low density) MD (medium density) HD (high density) XHD (extra high density) and thicknesses with fibres specifically engineered to provide maximum thermal and acoustic performance in many diverse commercial, residential, community and industrial applications.
- Available in standard white colour or black if required.

### Applications

**Absorb** is ideal for use behind perforated paneling and ceilings in sports halls, cinemas, studios, industrial enclosures, HVAC ducts, silencers or plant rooms. It is highly effective at reducing echo in rooms and provides even sound absorption across the speech range frequencies

**Absorb** is recommended as a cavity infill where low frequency noise separation through walls and ceilings is required.

**Absorb** can also be used behind decorative woven fabrics as acoustic panels or baffles to cut reverberation and echo in commercial areas where hard surfaces predominate and cause unwanted noise.

**Absorb** can also be laid above suspended ceilings to reduce flanking noise between rooms.

### Environmental benefits

**Polymax Absorb** is manufactured from thermally bonded polyester fibre with a minimum of 80% recycled fibre content from post-consumer PET packaging such as empty drink bottles. The product is 100% recyclable and has very high reuse potential as insulation.

- No chemicals or phenol formaldehyde resin binders are used in manufacture.
- Odourless and contains no harmful volatile organic compounds (VOC).
- No waste is generated in manufacture.
- No water or ozone-depleting gases are used in manufacture.
- No chlorides are present in the product.
- Martini's product stewardship programme can be viewed at [www.polymaxinsulation.com.au](http://www.polymaxinsulation.com.au)
- Suitable for use in Green Star™ projects.

### Acoustic performance to AS 1045

Frequencies hz	125	250	500	1000	2000	4000	NRC
Absorb MD 25	0.15	0.35	0.60	0.75	0.85	0.90	0.65
Absorb MD 50	0.25	0.55	0.85	1.00	1.00	1.00	0.85
Absorb HD 25	0.10	0.30	0.60	0.80	0.90	0.90	0.65
Absorb HD 50	0.20	0.60	1.00	1.00	1.00	1.00	0.95
Absorb HD 75	0.40	0.85	1.00	1.00	1.00	1.00	1.00
Absorb HD 100	0.55	1.00	1.00	1.00	0.95	1.00	1.00
Absorb XHD 25*	0.15	0.35	0.60	0.80	0.85	0.95	0.70
Absorb XHD 50	0.20	0.60	1.00	1.00	0.95	0.95	0.90
Absorb XHD 75*	0.45	0.80	1.00	1.00	1.00	1.00	1.00
Absorb XHD 100	0.60	1.00	1.00	1.00	1.00	1.00	1.00

\*Acoustic performance based on empirical data and expert opinion

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### Flow resistivity

Product	MKS RAYL/M
Absorb HD	7,994
Absorb XHD	14,693

Tested in accordance with ASTM C 522-03. Test conducted by Acoustic Studio Pty Ltd.

### Product information

Standard sizes and packaging (Can be made in other sizes to order)	Thickness mm	Length/width mm	NRC	Calculated R-Value
Absorb LD 25*	25	2400 x 1200	0.60	0.55
Absorb LD 50*	50	2400 x 1200	0.75	1.1
Absorb LD 75*	75	2400 x 1200	0.80	1.8
Absorb LD 100*	100	2400 x 1200	0.85	2.2
Absorb MD 25	25	2400 x 1200	0.65	0.6
Absorb MD 50	50	2400 x 1200	0.85	1.2
Absorb MD 75*	75	2400 x 1200	0.90	1.9
Absorb MD 100*	100	2400 x 1200	0.96	2.5
Absorb HD 13*	13	2400 x 1200	0.46	0.35
Absorb HD 25	25	2400 x 1200	0.65	0.7
Absorb HD 50	50	2400 x 1200	0.95	1.4
Absorb HD 75	75	2400 x 1200	1.00	2.1
Absorb HD 100	100	2400 x 1200	1.00	2.7
Absorb XHD 13*	13	2400 x 1200	0.48	0.35
Absorb XHD 25*	25	2400 x 1200	0.70	0.7
Absorb XHD 50	50	2400 x 1200	0.90	1.5
Absorb XHD 75*	75	2400 x 1200	1.00	2.2
Absorb XHD 100	100	2400 x 1200	1.00	3.0

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### Physical description and properties

**Volatiles:** Nil

**Specific Gravity:** 1.38

**Flash Point:** None allocated

**Other Properties:** Non-allergenic, low irritant, low flame response, resilient

**Ingredients:** Organic, long chain synthetic polymer

**Max Service Temp:** 150°C

**Alkalinity:** pH 7.8 (pH 7 is neutral)

**Moisture Absorption:** Exposure to an atmosphere of 50°C & 95% RH for four days gives moisture absorption of less than 0.2% by volume

<b>Fire Resistance:</b>	The following results were obtained when Martini Industries Polymax was subjected to early fire hazard testing in accordance with Australian Standards AS 1530.3. Polymax meets all requirements of the BCA for all insulation applications	Ignitability	0
		Spread of Flame	0
		Heat Evolved	0
		Smoke Developed	0-1

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