

melaphone
visual audio

" When you need to talk "



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WHEN YOU NEED TO TALK...SAFELY



IMAGE SHOWN IS MELAPHONE HIMACS (ACRYLIC/RESIN COMPOSITE) WITH POLYCARBONATE GUARD

OVERALL DIAMETER 245MM DIA

MELAPHONE PART REF 3001

GTIN REF 5060830140005 OR 50608301400052

Technical Data Sheet

► polycarbonate guard

Property	(Method ^a)	Conditions	Units	Value
Density	(D-792)		g/cm ³	1.2
Heat Deflection Temperature	(D-648)	Load: 1.82 MP	°C	130
Service Temperature Range			°C	-40 to +120
Coefficient of Linear Thermal Expansion	(D-696)		cm/cm °C	6.5 x 10 ⁻⁵
Thermal Conductivity	(C-177)		W/m K	0.21
Tensile Strength at Yield	(D-638)	10 mm/min	MPa	65
Tensile Strength at Break	(D-638)	10 mm/min	MPa	60
Elongation at Yield	(D-638)	10 mm/min	%	6
Elongation at Break	(D-638)	10 mm/min	%	>90
Tensile Modulus of Elasticity	(D-638)	10 mm/min	MPa	2,000
Flexural Strength	(D-790)	1.3 mm/min	MPa	100
Flexural Modulus	(D-790)	1.3 mm/min	MPa	2,600
Impact Falling Weight	(ISO 6603/1 E ₀)	3mm sheet	J	158
Rockwell Hardness	(D-785)		R Scale	125R
Light Transmission	(D-1003)	3mm clear sheet	%	89%
Haze	(D-1003)	3mm clear sheet	%	<0.5
Yellowness Index	(D-1003)	3mm clear sheet		<1

^a ASTM except where noted otherwise.

► flammability

PALSUN	
Standard	Classification ^b
BS 476/7	Class 1Y
NSP 92501, 4	M1, M2
DIN 4102	B1, B2
CSE RF 2/75/A, CSE RF 3/77	Class 1
UL Classified	V2 (File e221255)
ASTM D-635	CC1
PALSUN FR	
Standard	Classification ^b
UL Classified	V0 (File e221255)
ASTM D-2863-87	L.O.I. = 30
AU 1530.3-1982	Ignitability Index = 9
	Spread of Flame Index = 8
	Heat Evolved Index = 10
	Smoke Developed Index = 8

^b All the above depends on thickness. For additional information please contact your PALSUN distributor.

► aluminium rings

LM6 Aluminium Casting Alloy

LM6 Aluminium Casting Alloy (Al – Si12)

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This alloy conforms to British Standards 1490 LM6

CHEMICAL COMPOSITION	%
Copper	0.1 max.
Magnesium	0.10 max.
Silicon	10.0-13.0
Iron	0.6 max.
Manganese	0.5 max.
Nickel	0.1 max.
Zinc	0.1 max.
Lead	0.1 max.
Tin	0.05 max.
Titanium	0.2 max.
Aluminium	Remainder

MECHANICAL PROPERTIES	SAND CAST	CHILL CAST
0.2% Proof Stress (N/mm ²)*	60-70	70-80
Tensile Stress (N/mm ²) *	160-190	190-230
Elongation (%)*	5-10	7-15
Impact Resistance. Izod (Nm)	6.0	9.0
Brinell Hardness Number	50-55	55-60
Endurance Limit (5 X 10 ⁷ cycles; ± N/mm ²)	51	68
Modulus Of Elasticity (X 10 ³ N/mm ²)	71	71
Shear Strength N/mm ²)	120	

* The values shown are typical ranges for sand and chill cast test bars produced to the requirements of B.S. 1490 and for 6 mm diameter die cast bars; those in heavier type are minimum specification values.

► pvc single sided foam tape

Scapa 3507

DESCRIPTION

Scapa 3507 is primarily a foam compression sealant. The product is grey. The foam is predominantly closed celled and is a hard foam. An acrylic pressure sensitive adhesive is coated on one side, and the product has a paper release liner on the other non-adhesive face.

Scapa 3507 will act as a water-seal and air/dust seal when compressed.

APPLICATIONS

- Forms a compression water seal
- For preventing electrolytic corrosion
- For heavy duty cushioning
- For high load bearing applications
- Forms a compression air / dust seal
- For gap filling
- For anti slip mounting

PRODUCT BENEFITS

- Minimum 30% compression required to effect a water seal
- Service temperature -30 °C to +70 °C
- Application temperature: +10 °C to +40 °C
- Shelf life of 1 year
- Coated on one side with a high quality pressure sensitive acrylic adhesive
- Good resistance to dilute acids & alkalis
- Paper release liner on the non-adhesive face, reducing dimensional change during application
- Very good Ultra violet {UV} Light resistant
 - Resistance to abrasion, corrosion and moisture
 - Suitable for indoor and outdoor environments
- No known hazards associated with this product
- Pre-determined dimensional sealant reduces waste
- Clean to use
- Clean edge finish

TECHNICAL PROPERTIES

	Unit	Nominal Value	Test Method
Shore Hardness {OO} Scale	"OO"	50	Scapa F16
Force To Compress By 30 %	Ncm ⁻²	6.3	Scapa F4
Compression Deformation After 1 Minute	Ncm ⁻²	5.3	Scapa F4
10 Minute 180 ° Peel Adhesion	N/25mm	5	Scapa F9
Tensile Strength	Ncm ⁻²	88	Scapa F17
Elongation At Break	%	>140	Scapa F17
Thermal Conductivity (k)	Wm ⁻¹ K ⁻¹	0.043	Lee's Disc



► melinex polyester film

Melinex® 401 is a sparkling clear film with good handling qualities. The film, specially treated to give a slippery surface on one side, is suitable for applications where very high transparency is important. Melinex® 401 is supplied in knurled reel form and is currently available at 50, 75, 100, 125 micron.

TYPICAL VALUES OF PROPERTIES

Property	Test Method	Unit	Value		
General			Thickness µm		
Area Yield		m ² /kg	50	75	100
			14.4	9.6	7.2
Relative Density	ASTM D 1505-79 (modified to Melinex test method)		1.4		
Mechanical			MD*	TD**	
Tensile strength at break	ASTM D 882-83 (23°C at 50% rh strain rate 50%min)	kgf/mm ²	19	28	
Elongation at break	As above	%	155	85	
Slip (coefficient of static friction)	ASTM D 1894-78 (modified to Melinex test method)		<1.0		
F5		kgf/mm ²	11	11	
Optical					
Haze	ASTM D 1003-78 (measured on Gardner Hazemeter)		<0.6	<1	<1
Thermal					
Upper melt temperature	ASTM E794-85	°C	255 - 260		

Advanced Materials

Araldite® 2011

Structural Adhesives

Araldite® 2011

Two component epoxy adhesive

Key properties

- Multi purpose
- Long working life
- Low shrinkage
- Good resistance to dynamic loading
- Bonds a wide variety of materials in common use

Description

Araldite® 2011 is a multipurpose, two component, room temperature curing adhesive of high strength and toughness. It is suitable for bonding a wide variety of metals, ceramics, glass, rubber, rigid plastics and most other materials in common use. It is a versatile adhesive for the craftsman as well as most industrial applications.