

# Ceramic Urethane Sheets

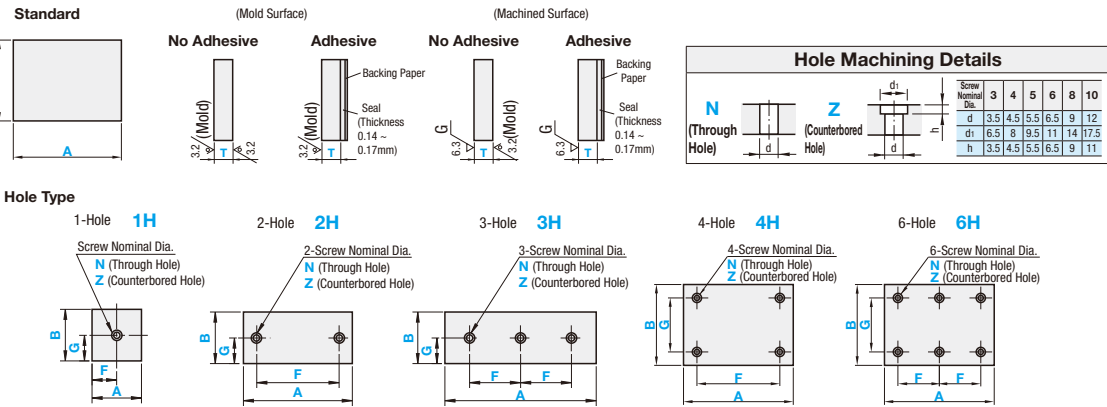
These MISUMI original urethane sheets are unique mixture of ceramic particles, excelling in abrasion resistance and have smooth machined surface in spite of its low hardness.

RoHS10

Type	Type		Material	Hardness	Color	Accuracy Standards
	No Adhesive	Adhesive				
Mold Surface Type	UTSCS	UTSCSA	Ceramic Urethane (Ether Polyurethane)	Shore A95	Natural Color	T Dimension Tolerance
	UTSCH	UTSCHA				
	UTSCM	UTSCMA				
Machined Surface Type	UTSCHK	UTSCHKA	Ceramic Urethane (Ether Polyurethane)	Shore A95	(Gray)	Tolerance
	UTSCMK	UTSCMKA				
	UTSCLK	UTSCLKA				

Tolerance		
T	Mold Surface Type	Machined Surface Type
2-4	±0.3	±0.5
5-10	±0.4	

Properties P.369  
 Mold Surface Type has glossy smooth surface but not slippery.  
 Machined Surface Type has ground surface on one side improving sliding property.



For Adhesive Type T4 or more, the adhesive tape may tear from the body. Please use it as temporary fixing, or in combination with bolt fixing.

## Standard Type, Mold Surface

Part Number		1mm Increment	
Type	T	A	B
No Adhesive	2	10-500	10-500
Adhesive	3		
UTSCS	4		
UTSCH	5		
UTSCM	6		
UTSCL	8		
	10		

## Standard Type, Machined Surface

Part Number		1mm Increment	
Type	T	A	B
No Adhesive	3	10-200	10-200
Adhesive	4		
UTSCSK	5		
UTSCHK	6		
UTSCMK	8		
UTSCLK	10		

## Hole Type, Mold Surface

Part Number		1mm Increment (A≥B≥T)		0.5mm Increment		Screw Nominal Dia.	
Type	Nominal	T	A	B	F	G	N (Through Hole) Z (Counterbored Hole)
Mold Surface Type	1H	2	25-500	25-500	9-491 (1H, 2H, 4H)	5-495 (1H, 2H, 3H)	3
No Adhesive	2H	3					
Adhesive	4						
UTSCS	5						
UTSCH	6						
UTSCM	8						
UTSCL	10						

## Hole Type, Machined Surface

Part Number		1mm Increment (A≥B≥T)		0.5mm Increment		Screw Nominal Dia.	
Type	Nominal	T	A	B	F	G	N (Through Hole) Z (Counterbored Hole)
Machined Surface Type	1H	3	25-300	25-200	9-291 (1H, 2H, 4H)	5-195 (1H, 2H, 3H)	3
No Adhesive	2H	4					
Adhesive	5						
UTSCSK	6						
UTSCHK	8						
UTSCMK	10						

Ordering Example  
 Standard Part Number - A - B  
 UTSCLK5 - 100 - 30

Days to Ship  
 Configure Online

Hole Type Part Number - A - B - F - G - Screw Nominal Dia.  
 UTSCMK2H5 - 100 - 50 - F80 - G25 - N3

Price Configure Online

Adhesive Charge Adhesive Type Price = Unit Price + Adhesive Charge

Adhesive Charge	B					
	10-50	51-100	101-200	201-300	301-400	401-500
10-50						
51-100						
101-200						
201-300						
301-400						
401-500						

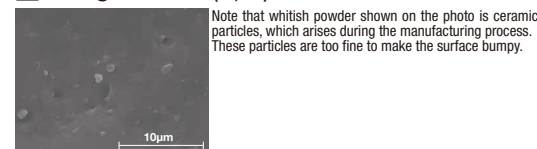
## Mold Surface Type

Part Number	Type	T	A	Unit Price						
				10-50	51-100	101-200	201-300	301-400	401-500	
No Adhesive	UTSCS	2	10-50							
Shore A95 (x1.0)	UTSCH	3	10-50							
Adhesive	UTSCHK	4	10-50							
No Adhesive + Adhesive Charge	UTSCSKA	5	10-50							
Shore A95 (x1.0)	UTSCHKA	6	10-50							
UTSCHA	7	10-50	10-50							
Shore A90 (x1.0)	UTSCLA	8	10-50							
( ) Material Multiplier		10	10-50							

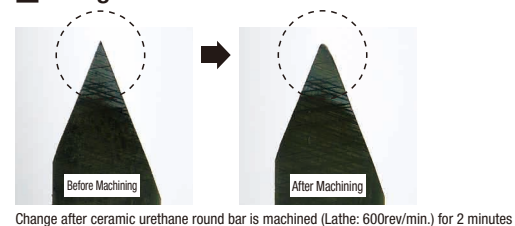
## Machined Surface Type

Part Number	Type	T	A	Unit Price				
				10-50	51-100	101-150	151-200	
No Adhesive	UTSCSK	3	10-50					
Shore A95 (x1.0)	UTSCHK	4	10-50					
Adhesive	UTSCHKA	5	10-50					
Price in the Table + Adhesive Charge	UTSCHKA	6	10-50					
Shore A95 (x1.0)	UTSCHKA	8	10-50					
( ) Material Multiplier		10	10-50					

## Enlarged Photo (x5,000)



## Change after Ceramic Urethane is Machined



Hole Machining Charge (Ex.)

Hole Type	Screw Nominal	Part Number - A - B - F - G - Screw Nominal Dia.			
		N (Through Hole)	Z (Counterbored Hole)		
1H		UTSCMK2H5	- 100 - 50 - F80 - G25 - N3		
2H					
3H					
4H					
6H					

Part Number	Type	T	A	Unit Price						
				10-50	51-100	101-200	201-300	301-400	401-500	
No Adhesive	UTSCM	2	10-50							
Shore A70 (x1.0)	UTSCHL	3	10-50							
Adhesive	UTSCHLKA	4	10-50							
No Adhesive + Adhesive Charge	UTSCHLKA	5	10-50							
Shore A50 (x1.1)	UTSCHLKA	6	10-50							
( ) Material Multiplier		10	10-50							

Part Number	Type	T	A	Unit Price				
				10-50	51-100	101-150	151-200	
No Adhesive	UTSCMK	3	10-50					
Shore A70 (x1.0)	UTSCLK	4	10-50					
Adhesive	UTSCLKA	5	10-50					
Price in the Table + Adhesive Charge	UTSCLKA	6	10-50					
Shore A50 (x1.1)	UTSCLKA	8	10-50					
( ) Material Multiplier		10	10-50					

## Taber Abrasion Test Results

Test	Material	General Urethane	Super Abrasion Resistant Vulkollan®	Abrasion Resistant Urethane	Ceramic Urethane
Abrasion Test (Taber Method)		197.3	33.9	73.8	101
Abraded Volume (mm³)					

Abrasive wheels are applied to the sample using a fixed weight for a specified number of cycles. From the weight loss of the sample it is possible to measure the abrasion resistance of a material. The above values are measured examples, not guaranteed ones.

Testing Method  
 JIS K 7204: 1999 "Plastics - Determination of Resistance to Wear by Abrasive Wheels"  
 Abrasive Wheel: H / 22  
 Load: 9.8N  
 Number of Strokes: 1,000  
 Test Parameter: 1  
 The values are not guaranteed but measured ones.