

1. Material Search

利用已知Material材料搜尋各種特性Property

例如：勾選ABS, Teflon, PA12, PA 610, PA 66並選取所需特性如CTE, Density, Cp, Tg, Thermal Conductivity，即顯示所有相關資訊。

Material Search
Property Search
Alloy Search
Element Search

Polymer All

- Ethylen/tetrafluorethylene copol. [E/TFE]
- Ethylen-vinyl acetate sopolymmer [E/VAC]
- Expanded Polystyrene Foam (NIST 1453)
- Extruded Polystyrene Foam
- Fluorocarbons Tfe (Teflon)
- Perfluorethylene/propylene copol. [FEP]
- Polyacrylnitrile [PAN]
- Polyallomer
- Polyamide 11 [PA 11]
- Polyamide 12 [PA 12]
- Polyamide 6 [PA 6]

Property Filter All

- CTE ppm
- Density (kg/m3)
- Specific Heat Capacity (J/kg*K)
- Tg (°C)
- Thermal Conductivity (W/m*K)
- Thermal Diffusivity (mm2/s)
- Thermal Effusivity (Ws0.5/(m2K))
- Tm (°C)

Next

Query

NAME	CHINESENAME	SYMBOL	CTE ppm	Density (kg/m3)	Specific Heat Capacity (J/kg*K)	Tg (°C)	Thermal Conductivity (W/m*K)
Acrylonitrile butadine styrene	丙烯腈丁二烯苯乙烯	ABS	65~95	1050		110~125	4.5~8
Ethylen-vinyl acetate sopolymmer		E/VAC				-20~20	
Fluorocarbons Tfe (Teflon)				2170	1004		0.251

2. Property Search

利用材料特性Property搜尋材料種類

例如：將高分子大類Tg點設定在-20°C~50°C時，可獲得五種材料資訊。

Material Search
Property Search
Alloy Search
Element Search

Max Search Material Count is: 1000

Classification

Polymer

Property 1

Property 2

Property 3

Min Value

Max Value

Min Value

Max Value

Min Value

Max Value

Search

Name	ChineseName	Symbol	Tg (°C)	MATNO
Ethylen-vinyl acetate sopolymmer		E/VAC	-20	2
Polytetrafluorethylen	聚四氟乙烯	PTFE	-20	30
Polyvinyl acetate	聚醋酸乙烯酯	PVAC	30	12
Polyvinylchloride, plastized	聚氯乙烯	PVC-P	-40	1
Polyvinylidene chloride	聚偏二氯乙烯	PVDC	-17	7



3. Alloy Search

選擇金屬種類並選取所需元素種類

勾選欲查詢的金屬種類及元素，即可顯示所有金屬種類的元素濃度範圍。

Material Search
Property Search
Alloy Search
Element Search

Aluminum All

- 5052
- 5052-plus
- 5056-82
- 5083
- 5086
- 5086-plus
- 5154
- 5454
- 5657
- 6040
- 6061

Next

Property Filter All

- Al
- Cr
- Cu
- Fe
- Mg
- Mn
- Si
- Ti
- Zn
- Zr

Query

GRADENAME	Al (%)	Cr (%)	Cu (%)	Fe (%)	Mg (%)	Mn (%)	Si (%)	Ti (%)	Zn (%)	Zr (%)
1000 Series	99.4~100		0~0.05	0~0.5			0~0.3			
5052	95.9~97.65	0.15~0.35	0~0.1	0~0.4	2.2~2.8	0~0.1	0~0.25		0~0.1	
6061	96~98.61	0.04~0.35	0.15~0.4	0~0.7	0.8~1.2	0~0.15	0.4~0.8	0~0.15	0~0.25	
7005	91.25~94.66	0.06~0.2	0~0.1	0~0.4	1~1.8	0.2~0.7	0~0.35		4~5	0.08~0.2

4. Element Search

選擇金屬種類鋁合金、銅合金、鐵合金、鎳合金等

例如：選Copper銅合金設定元素，將Mn錳元素設定在2%~5%之間、Co鈷元素在0.01~2%之間，可獲得符合條件的銅合金種類C862, C863, C867, C868, C955。

Material Search
Property Search
Alloy Search
Element Search

Max Search Alloy Count is: 1000

Nominal Base

Element 1

Element 2

Element 3

Min Value

Min Value

Min Value

Max Value

Max Value

Max Value

Search

Alloy	Mn (%)	Co (%)
C 862	2.5~5	0~0.25
C 863	2.5~5	0~0.25
C 867	1~3.5	0~0.25
C 868	2.5~4	0~0.25
C 955	0~3.5	0~0.5

