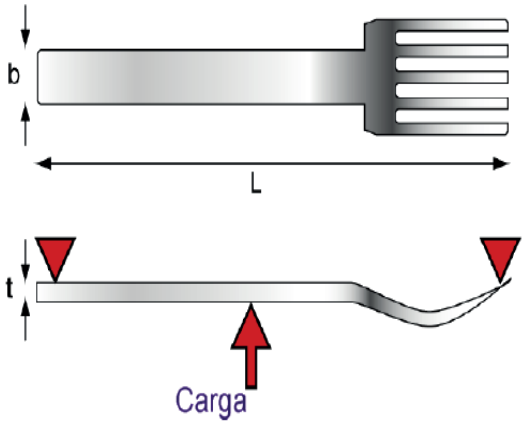
SELECCIÓN DE MATERIALES Y PROCESOS DE FABRICACIÓN

SELECCIÓN DE MATERIALES CANDIDATOS PARA CUBIERTOS DESECHABLES

Professor Juan Carlos Albiñana Medina
IES POLITECNIC - CASTELLÓN



GRANTA TEACHING RESOURCES

Granta's Teaching Resources website aims to support teaching of materials-related courses in Engineering, Science and Design. The resources come in various formats and are aimed at different levels of student. This resource has been donated by a member of faculty of one of the 700+ universities and Colleges worldwide who use Granta's CES EduPack. There is also a complete set of resources created by Professor Mike Ashby of the Department of Engineering at the University of Cambridge, founder of Granta Design. The teaching resource website contains both resources that require the use of CES EduPack and those that don't.

www.grantadesign.com/education/resources

Documento Nº 4

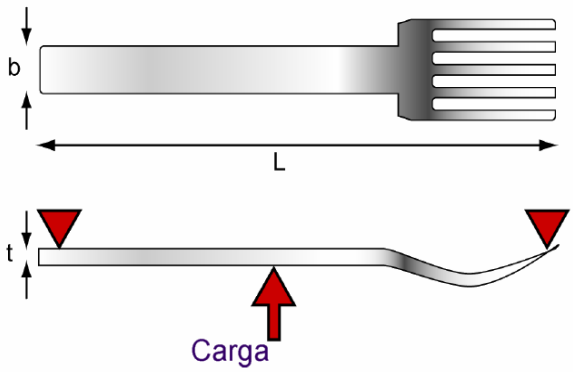
SELECCIÓN DE MATERIALES Y PROCESOS DE FABRICACIÓN:

"APLICACIÓN DEL PROCESO DE SELECCIÓN DE MATERIALES BASADO EN LOS DIAGRAMAS DE ASHBY"

"SELECCIÓN DE MATERIALES CANDIDATOS PARA CUBIERTOS DESECHABLES"

Albiñana Medina Joan Carles

CUBIERTOS DESECHABLES PARA COMIDA RÁPIDA.



Fabricante comercial:

http://www.plasticspoon-cn.es/

FUNCIÓN

- Producir cubiertos desechables respetuosos con el medio ambiente.

OBJETIVOS

- Maximizar la carga de rotura.
- Minimizar la masa de material.
- Minimizar la energía de producción.
- Minimizar el coste del material.

RESTRICCIONES

- Material reciclable o biodegradable.
- Reutilizable. Apto para lavavajillas.
- No inflamable o autoextinguible.
- Dimensiones especificas.

CES 2010 EDUPACK

Stage 3

Link Record	Number Passed	
ProcessUniverse: \ Shaping \ Deformation	1366	Show
ProcessUniverse: \ Shaping \ Molding	726	Show

Click on the headings to show/hide selection criteria

General properties

Composition overview

Composition detail

Mechanical properties

Thermal properties

	Minimum	Maximum	
Melting point			°C
Glass temperature			°C
Maximum service temperature	70		°C
Minimum service temperature			°C
Thermal conductivity			W/m.°C
Specific heat capacity			J/kg.°C
Thermal expansion coefficient			µstrain/°C

Electrical properties

Optical properties

Durability: flammability

Flammability	Self-extinguishing

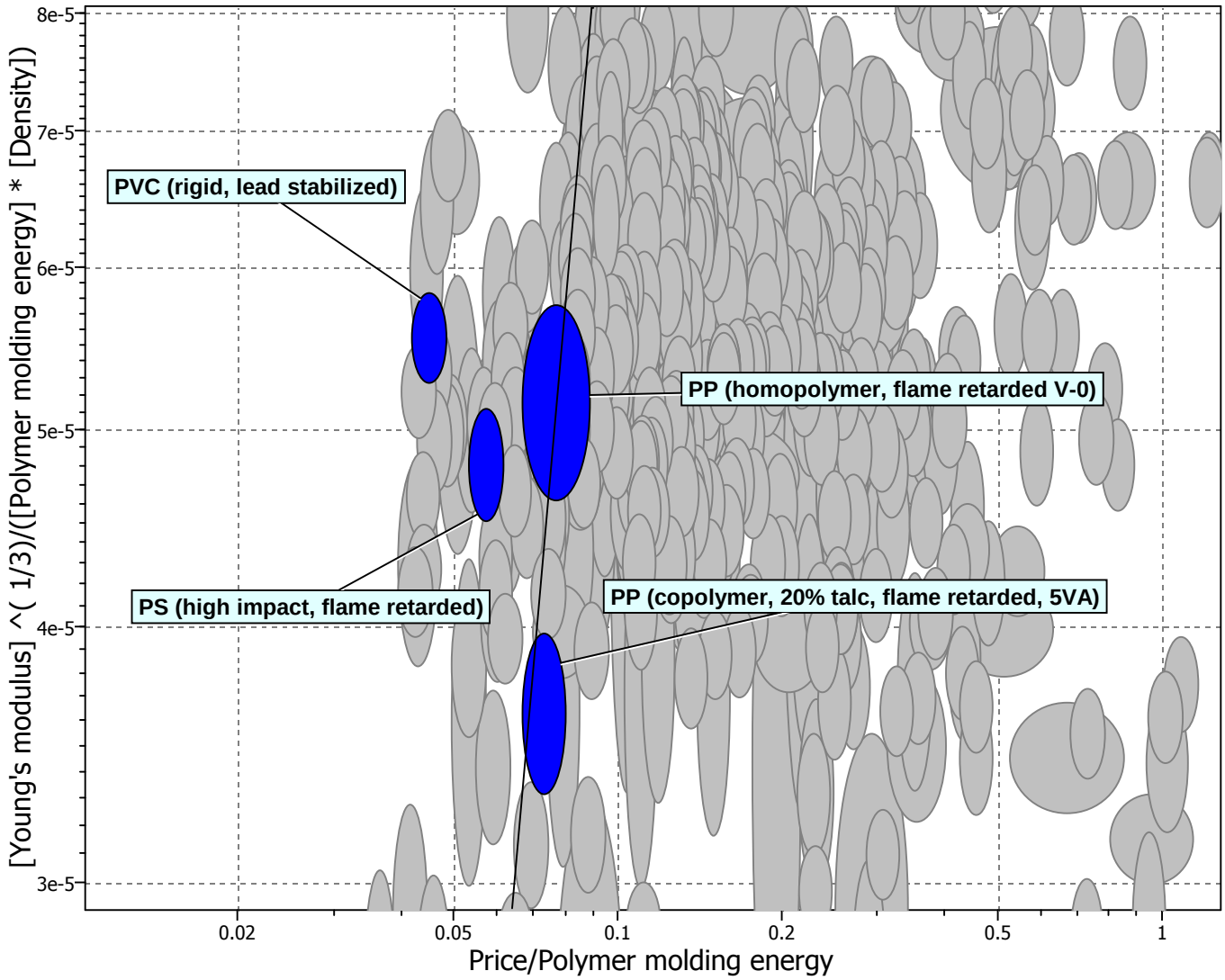
Durability: fluids and sunlight

Water (fresh)	Excellent
Water (salt)	Excellent
Weak acids	Acceptable Excellent
Strong acids	
Weak alkalis	Acceptable Excellent

Material recycling: energy, CO2 and recycle fraction

Recycle ☑

Minimum	Maximum



Author

We would like to thank Professor Juan Carlos Albiñana Medina
of the IES POLITECNIC - CASTELLÓN
for contributing this resource.
You can contact him via the email address
jcalbinana@gmail.com

Reproduction

Accuracy

We try hard to make sure that resources in Granta's Teaching Resource Website are of a high quality. If you have any suggestions for improvements, you can contact the author using the contact details above.

Other resources include:

- 19 PowerPoint lecture units
- Exercises with worked solutions
- Recorded webinars
- Posters
- White Papers
- Solution Manuals
- Interactive Case Studies

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