



Sustainable high quality packaging solutions

## ENVIRONMENTAL BENEFITS

### **Environmental Benefits of JSP ARPLANK® made out of Expanded Polyethylene (EPE) ARPAK®**

- All ARPLANK® products/blocks are produced using an inert gas blowing agent. No Volatile Organic Compounds (VOC's) are employed in the production of any ARPLANK® products. JSP ARPLANK® is the industries only EPE product produced without a VOC blowing agent.
- All ARPLANK® products are fully reusable and recyclable. ARPAK® EPE is labelled as a Recycling Code/Category 4 Plastic per the SPI (Society of the Plastics Industry) Recycling Standard.
- All ARPLANK® products are free of CFC's, HCFC's or any ozone depleting compounds.
- All ARPLANK® products are free of any restricted heavy metals, including Lead (Pb) or Lead Compounds, Mercury (Hg) or Mercury Compounds, and Chromium VI (Cr-VI), or Chromium Compounds, nor do they contain any Halogenated Compounds, or Brominated (Br) Compounds.
- ARPAK® Expanded Polyethylene (EPE) Products are available in molded densities ranging from 20 to 45 g/l.
- ARPAK® Expanded Polyethylene (EPE) Products are available in Black only.

For further information regarding JSP's ARPLANK® Expanded Polyethylene (EPE), please contact:

Jiri Slezak  
Sales Manager ARPLANK  
+420 602 444 92  
[jiri.slezak@jsp.com](mailto:jiri.slezak@jsp.com)



### Chemical Resistance for ARPLANK® EPE

Klassifikation	Chemische Bezeichnung	Beobachtungseffekt EPE
Mineral Oil	Lubricating Oil	1
	Engine Oil	1
	Gasoline	2
	Kerosene	2
	Heavy Oil	1
Organic Solvent	Toluene	2
	Benzene	2
	Acetone	2
	Ethyl Alcohol	1
	n-Heptane	2
	Carbon Tetrachloride	2
	Trichloroethylene	2
	Ethyl Acetate	1
	Methyl Ethyl Ketone	2
	Formaldehyde	1
Inorganic	10 % Sol. Suphuric Acid	1
	10 % Sol. Nitric Acid	1
	10 % Sol. Hydrochloric Acid	2
	10 % Sol. Sodium Hydroxide	1
	Ammonium Solution	1

1 = No Effect  
2 = Slight Swelling  
3 = Significant Swelling  
4 = Dissolved

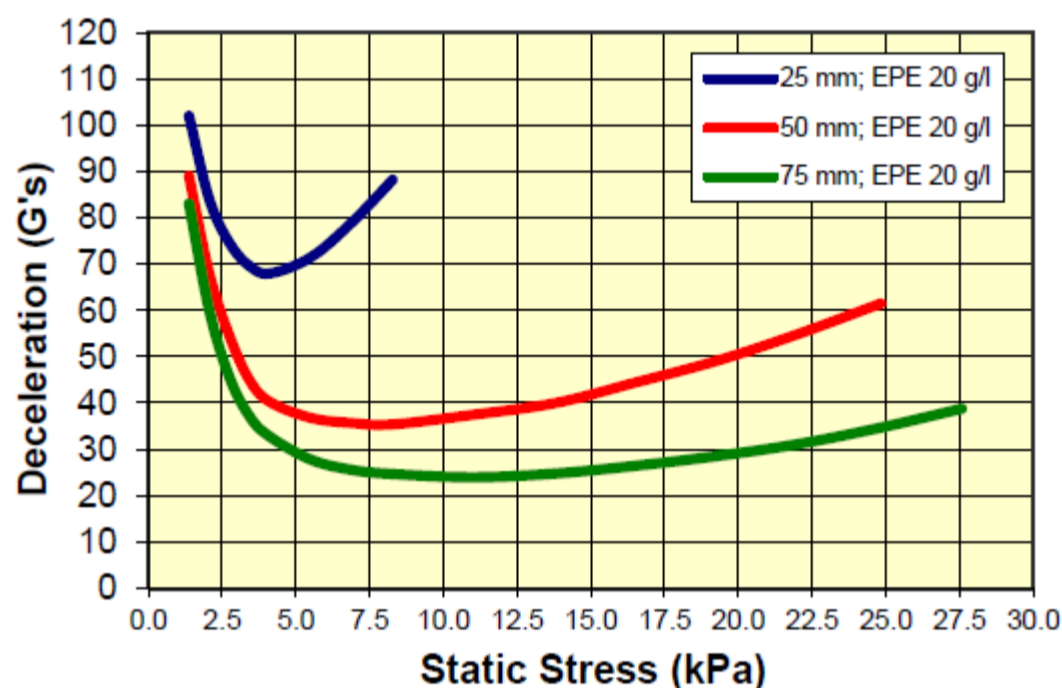
Hochwertige und nachhaltige Verpackungslösungen

### Physische Materialeigenschaften Information für ARPLANK® Produkte mit Dichtebereich von 20 bis 45 g/l

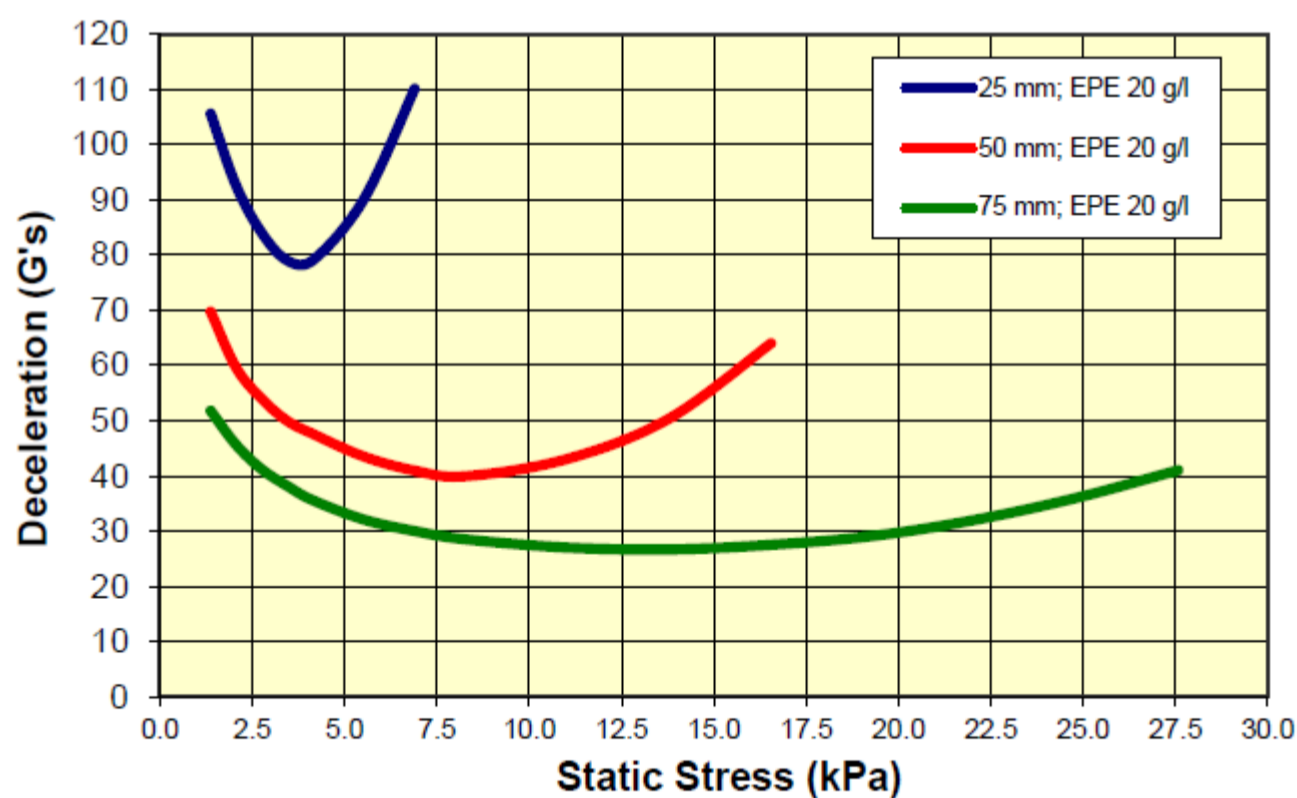
Physical Properties	Test Method	Units	ARPAK@R EPE		
Density	ASTM-D3575	g/l OR kg/m <sup>3</sup>	20	30	45
Compressive Strength @25%	ASTM-D3575	kPa	61	88	143
Compressive Strength @50%		kPa	114	152	231
Compressive Strength @75%		kPa	293	383	520
Tensile Strength	ASTM-D3575	kPa	276	359	483
Tensile Elongation	ASTM-D3575	%	38	32	30
Tear Strength	ASTM-D3575	kN/m	2.45	2.98	3.68
Compressive Set @25%	ASTM-D3575	%	3	4	4
Compressive Set @50%	ASTM-D3575	%	14	12	12
Buoyancy	ASTM-D3575	g/l OR kg/m <sup>3</sup>	971	953	947
Thermal Conductivity	ASTM-C177	(K) mW/m.K	45	43	43
Thermal Resistance	ASTM-C177	(R) @ 70° F	4.0	4.2	4.1
Coef. Of lin. Termal Expan.	ASTM-D696	mm/mm/K x 10 <sup>-5</sup>	15	11	8.6
Service Temperature	ASTM-D3575	°C (Max.)	71	71	71
Water Absorption	ASTM-D3575/C272	% (vol)	<5.0	<5.0	<5.0
Compressive Creep	ASTM-D3575	1000hr, % (kPa)	2.8 (7)	3.3 (7)	3.0 (10)
Fammability	FMVSS-302	<102 mm/min	Pass	Pass	Pass
Chemical Resistance	Diverse	1hr exposure (solvents, acids and alkalines)	Pass	Pass	Pass
Fuel Immersion	Coast Guard: Fuel B per 33 CFR 183.114	<5% (chg in vol)	Pass	Pass	Pass

Sustainable high quality packaging solutions

### Cushioning Performance Curve for 20 g/l ARPAK® Expanded Polyethylene (EPE) at a 60 cm Drop, 1st & 2nd thru 5th Impact/Drop – 25, 50, & 75 mm Thicknesses



**1st Drop**

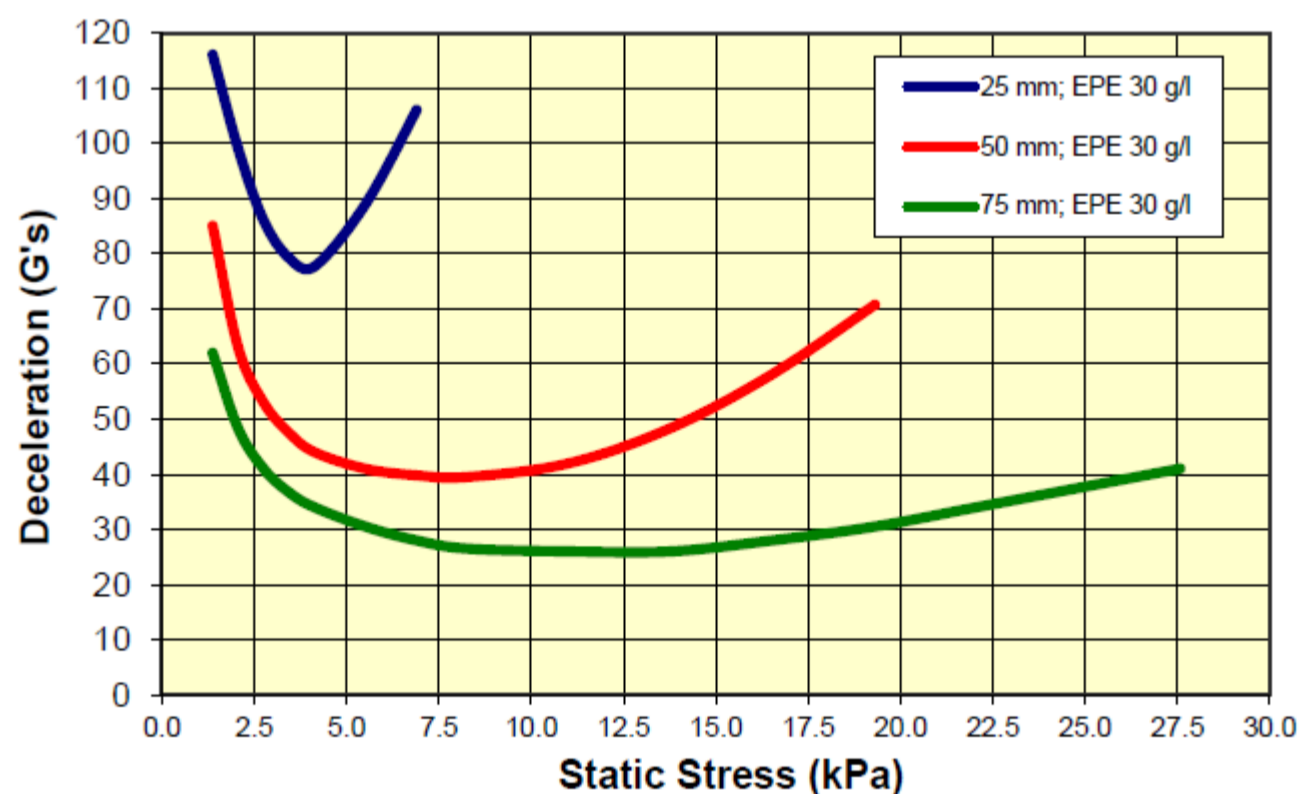
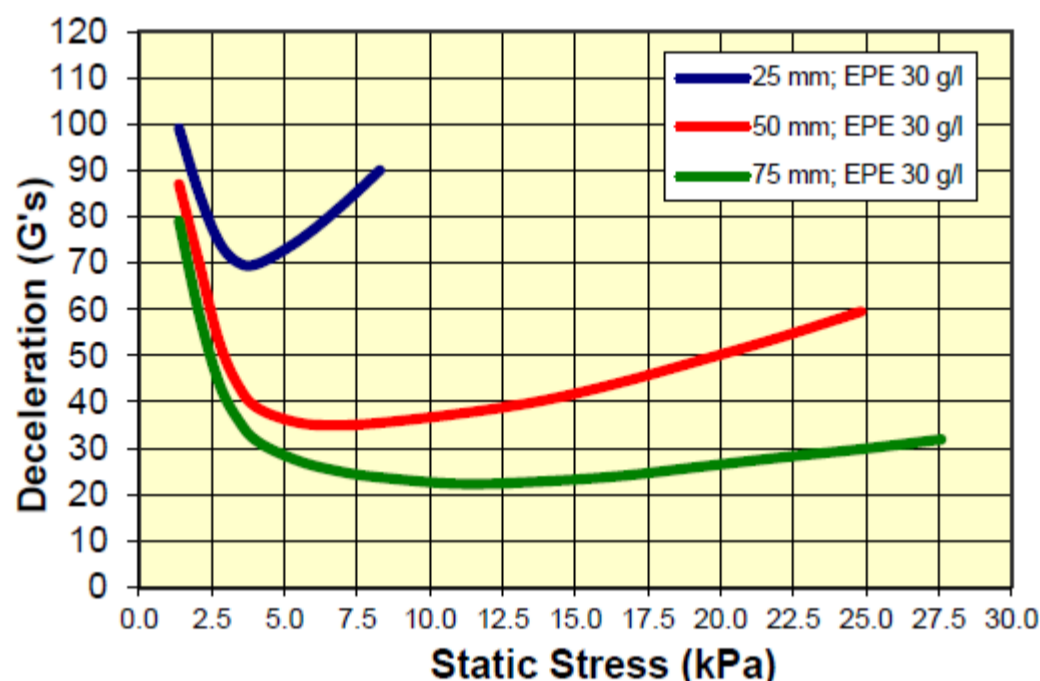


**2nd thru 5th Drop (Average)**

ARPLANK is ideally suited as an energy absorbing cushioning material for products requiring shock absorption, vibration dampening, insulation and chemical resistance. It withstands multiple impacts without damage, is very lightweight and is non-abrasive for Class A surfaces. It is also multidirectional in nature. Unlike traditional foams, which yield different properties along the extrusion, vertical and horizontal axes, the properties of ARPLANK are the same regardless of orientation, thus, making it an ideal and versatile product for protective packaging applications.

Sustainable high quality packaging solutions

### Cushioning Performance Curve for 30 g/l ARPAK® Expanded Polyethylene (EPE) at a 60 cm Drop, 1st & 2nd thru 5th Impact/Drop – 25, 50, & 75 mm Thicknesses

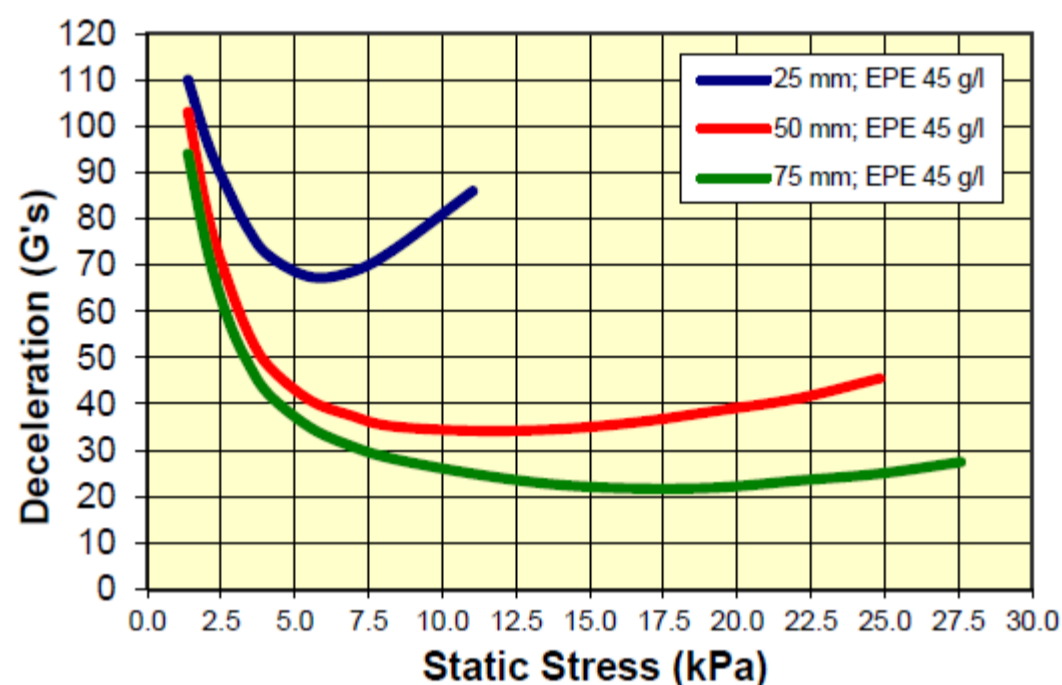


ARPLANK is ideally suited as an energy absorbing cushioning material for products requiring shock absorption, vibration dampening, insulation and chemical resistance. It withstands multiple impacts without damage, is very lightweight and is non-abrasive for Class A surfaces. It is also multidirectional in nature. Unlike traditional foams, which yield different properties along the extrusion, vertical and horizontal axes, the properties of ARPLANK are the same regardless of orientation, thus, making it an ideal and versatile product for protective packaging applications.

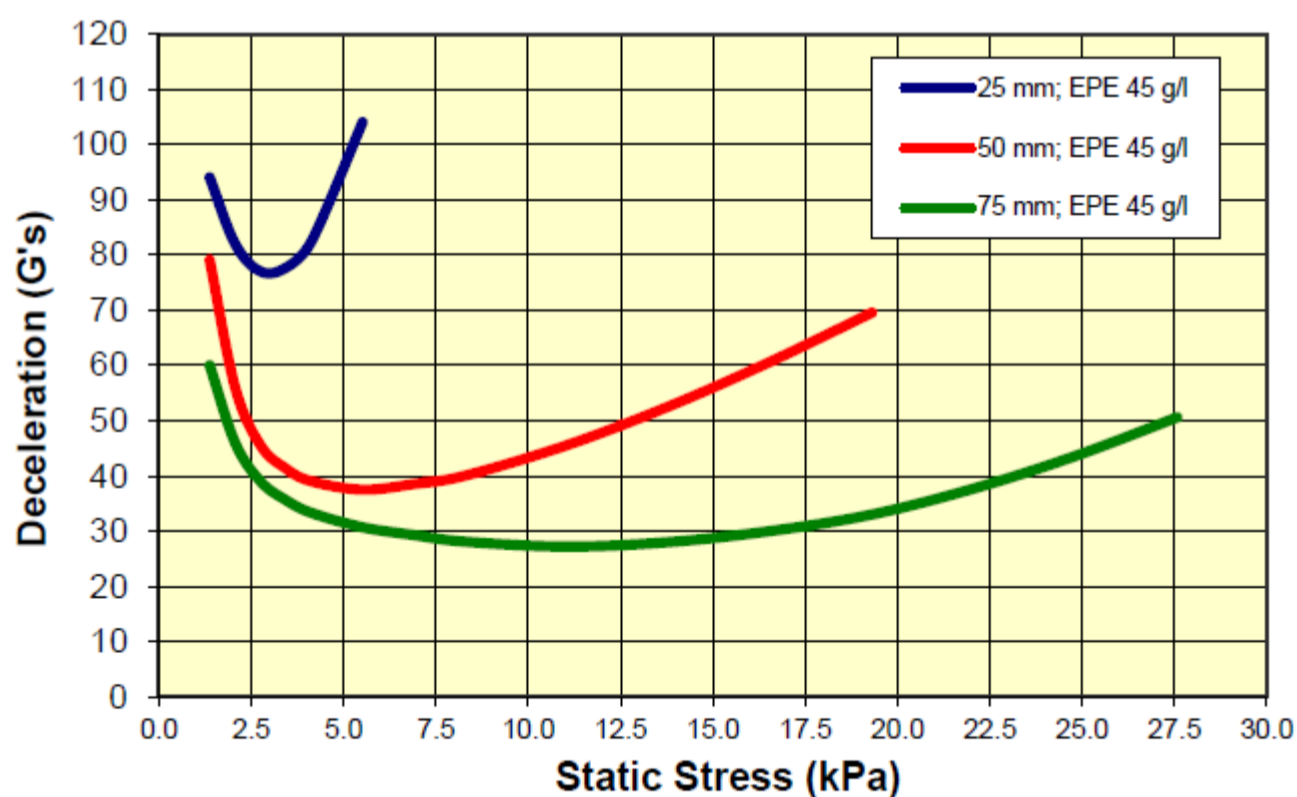


Sustainable high quality packaging solutions

### Cushioning Performance Curve for 45 g/l ARPAK® Expanded Polyethylene (EPE) at a 60 cm Drop, 1st & 2nd thru 5th Impact/Drop – 25, 50, & 75 mm Thicknesses



**1st Drop**



**2nd thru 5th Drop (Average)**

ARPLANK is ideally suited as an energy absorbing cushioning material for products requiring shock absorption, vibration dampening, insulation and chemical resistance. It withstands multiple impacts without damage, is very lightweight and is non-abrasive for Class A surfaces. It is also multidirectional in nature. Unlike traditional foams, which yield different properties along the extrusion, vertical and horizontal axes, the properties of ARPLANK are the same regardless of orientation, thus, making it an ideal and versatile product for protective packaging applications.