



SURECEL™ T-60 Processing Aid

Description

SURECEL™ T-60 Processing Aid is a functionalized high molecular weight acrylic processing aid for extruded free-foamed PVC applications. Besides leveraging the benefits of high molecular weight, SURECEL™ T-60 employs a unique reactive polymer technology. This enables it to offer greater expansion than conventional processing aids of similar molecular weight.

The unique functionality of SURECEL™ T-60 Processing Aid also contributes to lower density and finer foam cell structure at equivalent blowing agent levels than comparable conventional foam processing aids, while maintaining a wide processing window. This combination of benefits allows the foam sheet producer to achieve foam PVC sheet at lower density, uniform thickness, and finer cell structure, while maintaining the flexibility to control thickness over a range of pulling rates.

Applications

SURECEL™ T-60 Processing Aid is recommended for free-foamed PVC sheet applications, particularly thicker gauge sheet end applications.

Regional Product availability

- North America

Typical properties

	SURECEL™ T-60 Processing Aid
Physical appearance	White, free-flowing powder
Bulk density aerated (g/cm ³)	0.40 to 0.50
Volatiles (% max)	<1%

¹ Typical properties, not necessarily specifications

Key attributes

- Excellent density reduction capability for cellular applications, including a unique functionality that biases towards finer foam cell structure.
- High melt strength and elasticity
- Excellent die flow for sheet uniformity, even at low haul-off rates
- Wide processing window



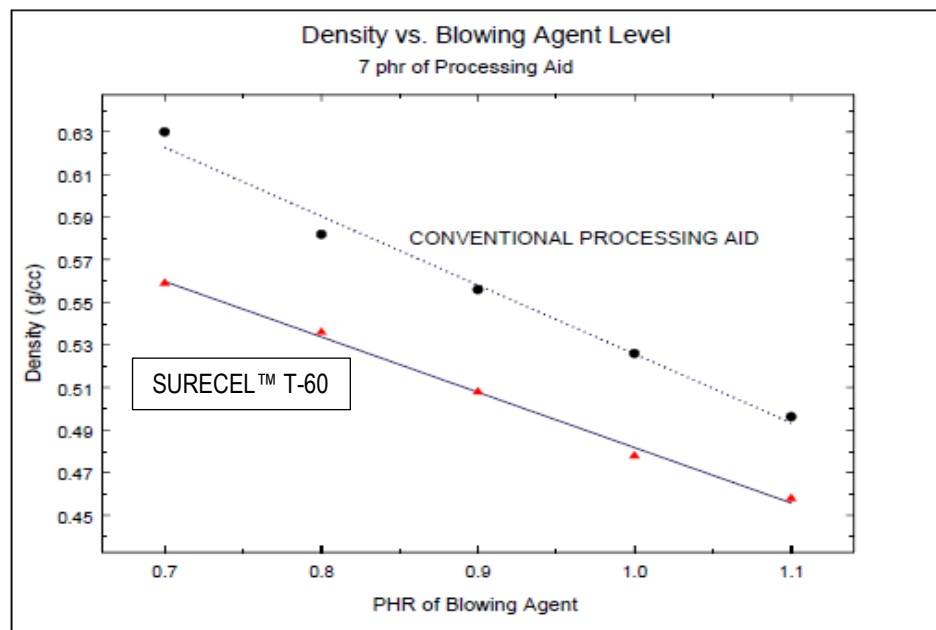
Technical Data Sheet

**PVC Formulation
Used for
Evaluations
presented below**

Ingredient	phr
PVC	100
Methyl Tin TGA Heat Stabilizer	2.5
SURECEL™ T-60 or comparative conventional foam Processing Aid	4.5-10
CaSt	1.3
Lubricant / Wax Package	1.6
PARALOID™ K-175 Processing Aid	2
TiO ₂	5
CaCO ₃	10
Blowing agent (endo/exo blend)	varied

**Density
Reduction
Capability**

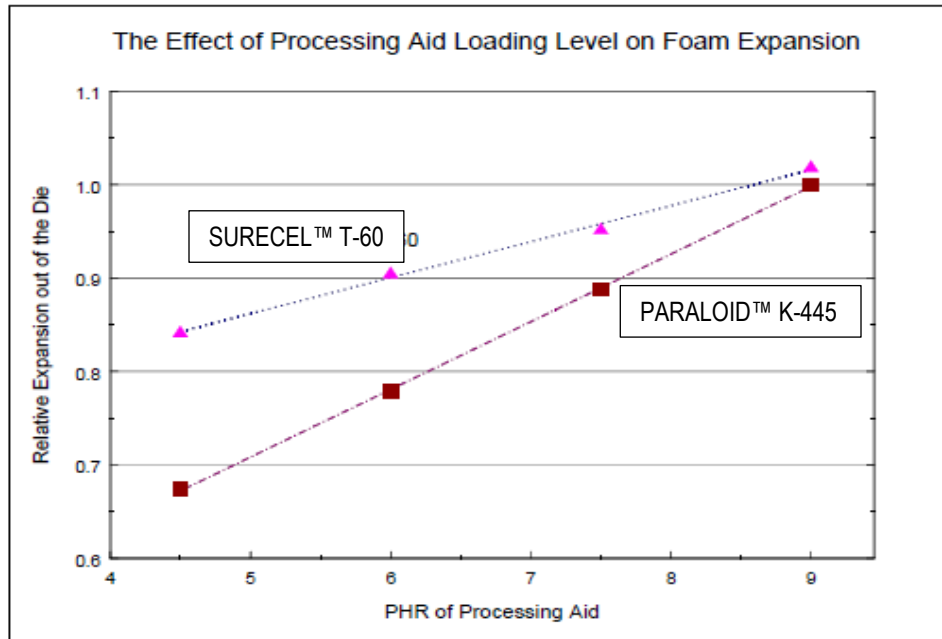
SURECEL™ T-60 Processing Aid imparts lower density to free foam sheet parts over a wide range of blowing agent, due to its functionalization, compared to conventional foam processing aid.





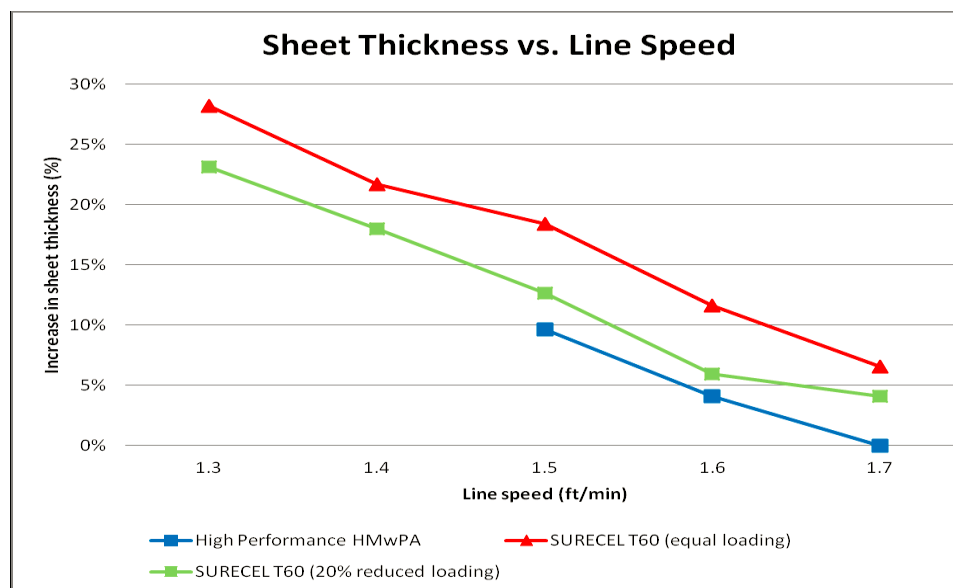
Relative Foam Expansion

SURECEL™ T-60 Processing Aid imparts greater foam expansion, particularly at lower processing aid levels, versus a comparable conventional processing aid, PARALOID™ K-445 Processing Aid. Fixed blowing agent level of 0.68phr.



Processing Window

SURECEL™ T-60 Processing Aid enables an extrusion processor to slow the pull rate or line speed to greater extent, thus enabling production of thicker sheets, than previous processing aid technologies allowed. Usually gauge control across the sheet width limits the extent one can slow the rate and thus limits the thickness that can be extruded.

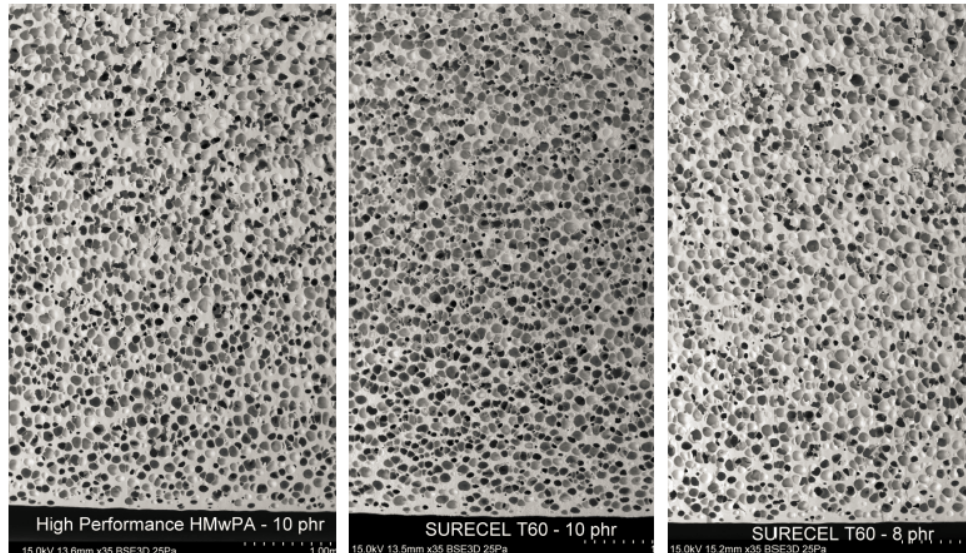




Technical Data Sheet

Cell Structure Benefit

The micrographs below demonstrate the cell structure improvement which can be made by using SURECEL™ T-60 Functionalized Processing Aid, over conventional foam processing aids in free foam extruded sheet.



Note that this benefit is in concert with lower density, at fixed CBA:

Conventional high Mw processing aid at 10phr:	Density: 0.55 g/cc
SURECEL™ T-60 Processing Aid at 10phr:	Density: 0.52 g/cc
SURECEL™ T-60 Processing Aid at 8phr	Density: 0.54 g/cc

Product Packaging

The standard package is either a unitized pallet of 20-25 kg bags or 500-900 kg super sacks/big bags/FIBC bags.

Please consult a Dow representative for specific package availability for this product.

Quality management system

The Dow Chemical Company (Dow) and its subsidiaries have implemented a comprehensive quality management system pursuant to Good Manufacturing Practices (GMP) and various quality management standards including ISO 9001. An overview of **The Dow Quality Management System Manual** can be obtained at the following Internet web site – <http://www.dow.com/en-us/about-dow/our-company/beliefs-and-culture/quality-culture>. As part of that system, the Dow Plastics Additives business maintain ISO 9001 registration for most of our manufacturing plants. A copy of these certificates available upon request.

Storage and handling precautions

Store unopened in original packaging at ambient temperature. If material is opened, it should not be left exposed and should be used within one month. When stored correctly in the original packaging, the shelf life is 3 years from date of manufacture.

Before using this product, consult the Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage. Contact Dow for copies of the SDS and for more information on this product. Information contained in a TDS document cannot substitute a SDS.

Disposal considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.



Technical Data Sheet

Medical Applications Restrictions

Dow prohibits sale into certain medical applications. Please check with Dow if you believe your application could be in violation of this policy.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. The customer is solely responsible for determining the suitability of the Dow product for the uses contemplated by customer. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow and available online at www.dow.com.

Regulatory Information

If your application includes a sensitive application such as food contact or drinking water requirements or if you need other regulatory information, please contact your local Dow representative.

Contact information:

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