Technical Data Sheet

PARALOID™ K-125P Processing Aid

Description

PARALOID™ K-125P Additive is a general purpose processing aid for PVC used mainly in building applications, such as window frames, panels, siding, fences, pipes, fittings, and injection-molded parts. It is also available for selected applications, in particular, PVC foam and deep-draw thermo-formed containers.

PARALOID™ K-125P Processing Aid is based upon proven acrylic processing aid technology from Dow Inc.

Applications

- Window Profiles
- Pipe and fittings
- Other clear and opaque PVC articles

Regional Product availability

- Asia Pacific

Typical properties

PARALOID™ K-125P Processing Aid is a free-flowing powder

	PARALOID™ K-125P
Physical appearance	White Powder
Bulk density aerated (g/cm^3)	0.45±0.10
Volatiles (% max)	1.0
Fines level, on 850 micron (% max)	1.0
Fines level, through 45 micron (% max)	15.0

Key attributes

- Higher dispersibility in the PVC melt
- Excellent fusion promotion efficiency
- Outstanding melt strength enhancement

Rheology and processing

FIGURE 1
FUSION PROMOTION WITH PARALOID™ K-125P PROCESSING AID IN TIN-STABILIZED FORMULATION WITHOUT PARALOID BTA-717 IMPACT MODIFIER

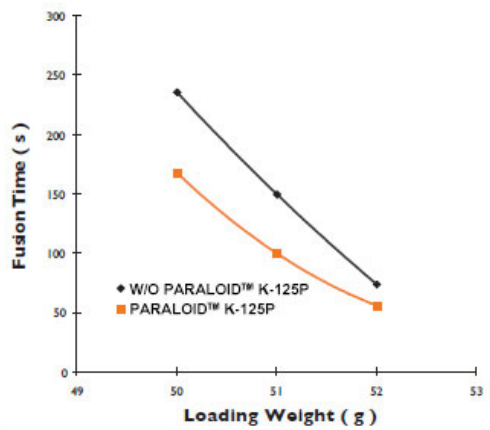
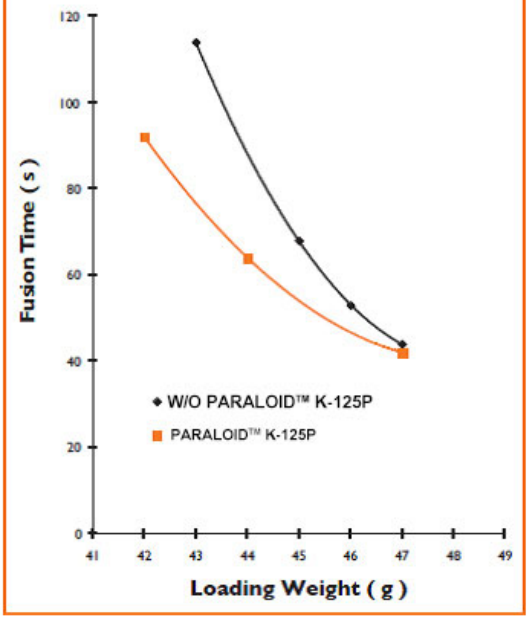


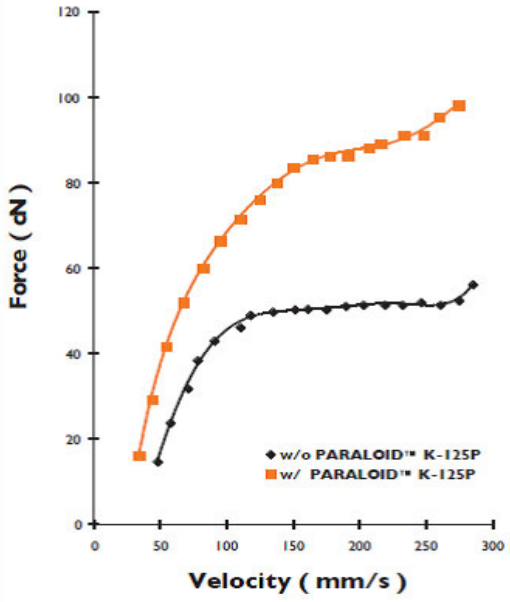
FIGURE 2
FUSION PROMOTION WITH PARALOID™ K-125P PROCESSING AID IN TIN-STABILIZED FORMULATION WITH PARALOID™ BTA-717 IMPACT MODIFIER



Melt Strength Enhancement

Adding PARALOID™ K-125P Processing Aid is imparting sufficient melt strength for molten PVC compound. As shown in Figure 3, this is very useful to improve processability of deep-draw thermoforming.

FIGURE 3
MELT TENSION ENHANCEMENT WITH PARALOID™ K-125P PROCESSING AID



Experimental

EXPERIMENTAL

Fusion Promotion Test/ Melt Fracture	Melt Tension Measurement	Deep-draw Thermoforming
Formulation sPVC K58 = 100 weight parts ADVASTAB™ methyl tin stabilizer = 1.5 ADVALUBE™ glycerol mono oleate = 0.8 ADVAWAX™ ester wax (Tm 55°C) = 0.3 PARALOID™ K-175P = 0.5 PARALOID™ K-125P = 1.0 or 0 PARALOID™ BTA-717 = 6.0 or 0 *Equipment* Brabender Plasticorder PL-2000 (Extrusion System for Melt Fracture) Bowl Type :W50 Bowl Temp.: 165°C Rotor Speed : 35 min-1	*Formulation* sPVC K58 = 100 weight parts ADVASTAB™ methyl tin stabilizer = 1.8 ADVALUBE™ glycerol mono oleate = 0.8 ADVAWAX™ ester wax (Tm 55°C) = 0.5 PARALOID™ K-175P = 0.5 PARALOID™ K-125P = 3.0 or 0 PARALOID™ BTA-717 = 6.0 *Equipment* Brabender Plasticorder PL-2000 Extrusion System Melt Tension Meter	*Formulation* sPVC K58 = 100 weight parts ADVASTAB™ methyl tin stabilizer = 1.5 ADVALUBE™ glycerol mono oleate = 0.8 ADVAWAX™ ester wax (Tm 55°C) = 0.3 PARALOID™ K-175P = 0.5 PARALOID™ K-125P = 2.0 or 0 PARALOID™ BTA-717 = 6.0

Note: ADVASTAB™, ADVALUBE™, and ADVAWAX™ are trademarks of PMC Cincinnati, Inc.

Product Packaging

The standard package is either a unitized pallet of 20 kg bags or 500 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.

Medical Applications Restrictions

Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:

- Long-term or permanent contact with internal body fluids or tissues. "Long-term" is contact which exceeds 72 continuous hours

- Use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices)

- Use as a critical component in medical devices that support or sustain human life

- Use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction

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