

POLYBATCH® PROCESSING AIDS

When processing on conventional extrusion equipment designed for LDPE, the melt rheology of LLDPE causes many problems. ***POLYBATCH® AMF 702 and AMF 705 HF*** improve drastically the extrusion characteristics and facilitate the manufacture of tubular and cast film from LLDPE, HDPE and/or high ratio blends of LLDPE/LDPE. ***POLYBATCH® AMF 702 and AMF 705 HF*** eliminate Melt Fracture and reduce Head Pressure when producing on blown film lines equipped with standard narrow gap dies. (0.8 to 1.3 mm)

PHYSICAL PROPERTIES

	AMF 702	AMF 705 HF
Base Resin	PE	PE
Melt Index (190/2,16; g/10 min)	2	2
Specific Gravity (g/cm ₃)	0,93	0,91
Bulk Density (g/l)	550	550
Moisture Content (ppm)	< 1500	< 1500
Additiv content	2 %	5 %

USAGE

POLYBATCH® AMF 70 : is the Standard Processing Aid Concentrate to be used in order to eliminate Melt Fracture of LLDPE up to 240°C.

POLYBATCH® AMF 705 HF : is particularly effective in “Highly filled” applications such as films containing more then 2% calcium carbonate or titaniumdioxide or more than 0.5 % antiblocking agent.

Because ***POLYBATCH® AMF 702 and AMF 705 HF*** lower melt pressure and melt temperature, processing can be done at lower temperatures resulting in better bubble stability, much less degradation and, because of the faster cooling, a considerable increase in output can be obtained.

OPERATING PROCEDURE

In general, a two step operating procedure is recommended.

Step 1: Precondition the extruder and die with a 70/30 mixture of LLDPE and ***POLYBATCH® AMF 702*** or ***AMF 705 HF*** during 10 to 20 minutes in order to develop a lubricating layer on the metal surfaces in the extruder and die. The preconditioning period can be stopped when the Melt Fracture is eliminated. Higher preconditioning concentrations of ***POLYBATCH® AMF 702*** or ***AMF 705 HF*** may be used to minimise the procedure.

Step 2: After preconditioning the processing equipment, reduce ***POLYBATCH® AMF 702*** or ***AMF 705 HF*** to a “maintenance concentration”. The narrower the die gap, the more has to be used.

Typical let-down ratio:

* LLDPE of 20 micron: 2% ***AMF 702***

* LLDPE of 20 micron containing 5% TiO₂: 1.5% ***AMF 705 HF***

Reported values pertain only to natural resins : pigmenting may vary properties.

NOTE : While the information herein is believed to be reliable and correct, nothing herein is intended and should not be construed as a representation or warranty, expressed or implied, as to results obtained or to be obtained by others who may make use of this information or with respect to the absence, existence or validity of patent rights, if any of others involving any composition or process herein referred to ; or an inducement or recommendation for the violation of any such patent rights; and responsibility and liability therefore is disclaimed.

POLYBATCH® AMF 702 and AMF 705 HF have NO adverse effect on heat sealing or corona treating characteristics like printing ink adhesion and/or glueing.

POLYBATCH® AMF 702 and AMF 705 HF do NOT interfere with the usual additives like slip, antiblock, etc. However, high surface area inorganic solids, such as titaniumdioxide, calcium carbonate, etc. and amine containing additives like antistatic agents and HALS UV stabilisers, etc. may interfere with the potency of these concentrates.

In that case *POLYBATCH® AMF 705 HF* is preferred.

Higher concentrations may be required to eliminate melt fracture on equipment with chrome plated dies.

FOOD APPROVAL

POLYBATCH® AMF 702 and AMF 705 HF can be used for food-packaging according :

FDA	max. 2,5 % / 1 %	for all foods
	max. 5 % / 2 %	for non alcoholic foods up to 100 °C
EEC (90/128)	no limitation	

Detailed information available upon request.

PACKAGING

POLYBATCH® AMF 702 and AMF 705 HF are packed in 25 kg Polyethylene bags on shrink-wrapped pallets.

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