ADMER™ AT2397E

PE-Grade
MFR: 4.0
Density: 0.92

Technical Data Sheet

Preface

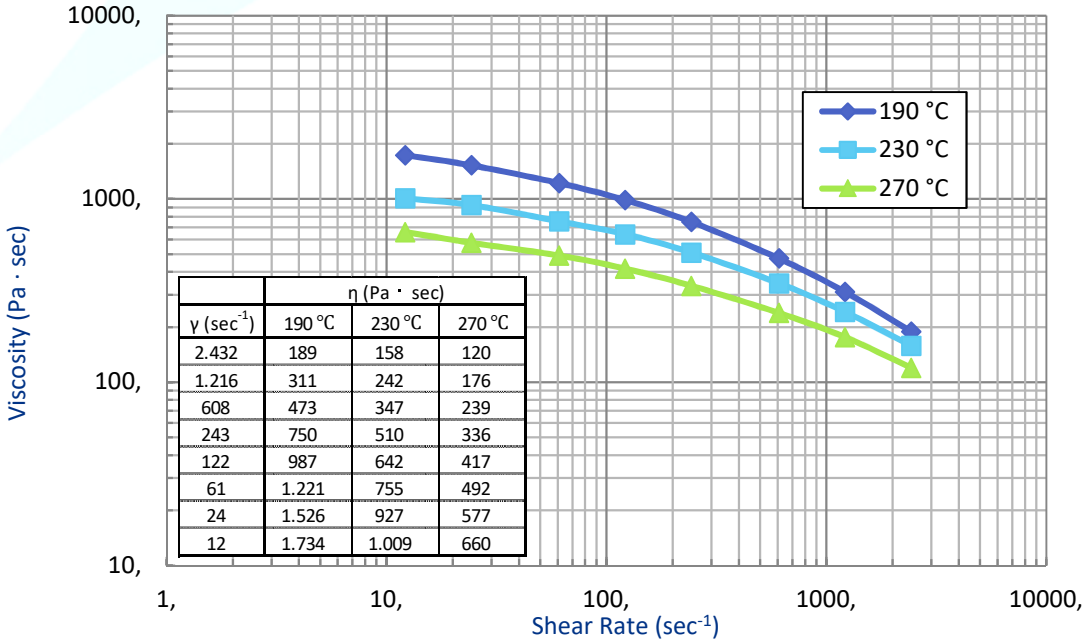
ADMER™ AT2397E is designed for multilayer pipes composed of polyethylene (PEx, PE-RT) and aluminum. It offers advanced adhesion durability, high heat resistance and good processability for PE and PA.

Properties

Item	Value	Unit	ASTM Testing Method
MFR (190°C, 2.16kg)	4.0	g/10 min	D1238
Density	0.92	g/cm³	D1505
Tensile Strength at Yield	10	MPa	D638
Tensile Strength at Break	21	MPa	D638
Elongation at Break	> 500	%	D638
Izod Impact Strength	No Break	J/m²	D256
Shore Hardness	47	D scale	D2240
Vicat Softening Point	90	°C	D1525
Melting Temperature	123	°C	ISO 11357-3
Oxidative Induction Time	> 45	min	ISO 11357-6, 210°C

Vicat measured at load 1 (10N), rate A (50°C/h)

Flow curve of ADMER™ AT2397E



	η (Pa · sec)		
γ (sec^{-1})	190 °C	230 °C	270 °C
2.432	189	158	120
1.216	311	242	176
608	473	347	239
243	750	510	336
122	987	642	417
61	1.221	755	492
24	1.526	927	577
12	1.734	1.009	660

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Processing

The recommended processing temperatures for ADMER™ can be found in our temperature proposal.
Maximum temperature: 300 °C; Temperatures above the upper limit or long residence times of molten resin may lead to decomposition of the polymer. Decomposition products may be carbon monoxide, carbon dioxide, hydrocarbons and water.
Whilst the extrusion process is either interrupted or terminated:

Less than 2 hours: Screw rotation can be stopped maintaining temperature.
More than 2 hours: Purge out and shut down in accordance with common procedure.

Handling

ADMER™ resins are supplied in the form of small, free flowing pellets and can be easily handled with commercially available equipment. We recommend to store ADMER™ at a dry and clean place at room temperature without sunlight exposure. Precaution should be taken in opening the package to avoid contamination by foreign materials.
Since ADMER™ is a non-hygroscopic material, it absorbs less moisture than non-polyolefin polymers. Therefore, ADMER™ does not require drying prior to processing.
ADMER™ can be re-used, recycled or incinerated with energy recovery. We do not recommend disposing of ADMER™ on a landfill. However, any disposal must comply with local regulations and recommendations.

Food Status

This information is only suitable for grade selection. For detailed information always refer to our Food Contact Status Declaration which is available on request. It is the full responsibility of the manufacturer of food contact materials or articles to ensure the suitability of above mentioned ADMER™ grade in its intended application.

EU: Monomers and additives are listed as authorized monomers/additives in Annex I of Regulation (EU) No. 10/2011 as amended to the current date. Please refer to our Food Contact Status Declaration regarding substances restricted by SMLs and Dual Use Additives.

USA: This ADMER™ grade conforms to FDA 21 CFR §175.105 (Adhesives). Please contact us for further details.

Pipe Approvals

Approval for the usage of certain ADMER™ grades in pipe applications must always be obtained by pipe manufacturers. We will support customers in the pipe sector in that approval process by directly disclosing the required information to authorized testing laboratories on request. Evidence of ageing resistance of ADMER™ pipe grades according to DVGW W542 and ISO2578 has been obtained.

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