

Product Data Sheet

SUMITOMO PMMA

EX

Polymethyl Methacrylate, Extrusion

Applications	General purpose extrusion for sheets for signage, display, sound barrier, and LED light guide panels, as well as for profiles pipes and rods.
Characteristics	Excellent extrusion processability, high clarity, excellent weather resistance.
Typical Processing Conditions	Extrusion : L/D 30 - 35, barrel 200°C - 245°C, die 235°C - 245°C Annealing temperature : 75°C - 85°C, 4 hours

Typical Properties

Physical		Value	Unit	Method
Melt Flow Rate	230°C, 3.8kg	1.5	g/10min	ISO 1133
Specific Gravity		1.19	-	ISO 1183
Water Absorbtion		0.3	%	ISO 62
Optical		Value	Unit	Method
Refractive Index		1.49	-	ISO 489
Total Light Transmittance		92	%	ISO 13468-1
Haze		< 0.5	%	ISO 14782
Mechanical		Value	Unit	Method
Tensile Strength	at Break	74	MPa	ISO 527-2
Tensile Elongation	at Break	5	%	ISO 527-2
Flexural Strength		120	MPa	ISO 178
Flexural Modulus		3100	MPa	ISO 178
Impact Strength, Charpy	notched	1.4	kJ/m ²	ISO 179-1
Thermal		Value	Unit	Method
Coefficient Of Linear Expansion		7 x 10 ⁻⁵	1/°C	ISO 11359-2
Vicat Softening Temperature		104	°C	ISO 306
Heat Deflection Temperature	1.82 Mpa, annealed	94	°C	ISO 75-2Af
Electrical Property		Value	Unit	Method
Surface Resistivity		> 10 ¹⁶	Ω	IEC 60093
Volume Resistivity		> 10 ¹⁵	Ω cm	IEC 60093
Insulation Resistance		> 10 ¹⁵	Ω	IEC 60167
Dielectric Strength		20	kV/mm	IEC 60243-1
Dielectric Constant	1MHz	3.1	-	IEC 60250
Other		Value	Unit	Method
Mold Shrinkage		0.2 - 0.6	%	ISO 294-4
Hardness	Rockwell M	100	-	ISO 2039-2
UL Flammability		HB	-	UL94

Manufacturer

EX is manufactured in Saudi Arabia by Rabigh Refining & Petrochemical Co. (Petro Rabigh).
Petro Rabigh is an ISO 9001, ISO 14001, and ISO 45001 certified company.

Regulatory Compliances

Unmodified EX complies with most of the common regulatory in the industry for its intended applications.
Please contact your nearest SCA representative for more information.

Restriction of Hazardous Substances

The substances regulated under EU Directive 2011/65/EC, and its amendments, on RoHS in electrical and electronic equipment are not used in the manufacturing process, and are therefore not expected to be present in the product.

Storage and Handling

EX is supplied in 25kg bags, 750kg jumbo bags, or bulk containers. It is advisable to store in a well-ventilated storage facility, protected from rain, direct exposure to sunlight, temperature, and dust.

Moisture may accumulate inside the packaging if there is a significant fluctuation in ambient temperature and high relative humidity. If this occurs, customer is strongly advised to dry the resin prior to use. Direct exposure to sunlight and excessive ambient temperature may affect the properties, appearance, and odour characteristic of the resin.

It is recommended to process EX within 6 months upon receipt.

Please refer to the Safety Data Sheet (SDS) for information regarding industrial health and safety issues.

Disposal and the Environment

SCA prioritises environmental management in all our operations in responsibility and respect towards the community and the environment.

Disposal of EX should at all times comply with the local and regional environmental protection and waste disposal regulations.

Office Locations**SUMITOMO CHEMICAL ASIA PTE LTD**

3 Fraser Street, #07-28 DUO Tower, SINGAPORE 189352

Phone +65 6303 5188

Fax +65 6298 9621

Web Site www.sumitomo-chem.com.sg

SUMIKA PLASTICS AND CHEMICALS TRADING (SHANGHAI) CO., LTD.

1607, Ascendas Plaza, 333 Tian Yao Qiao Road, Xu Hui District, Shanghai, CHINA 200030

Phone +86 21 6448 2255

Fax +86 21 6407 7365

SUMIKA PLASTICS AND CHEMICALS TRADING (SHANGHAI) CO., LTD., GUANGZHOU BRANCH

Room 6404, Office Building, CITIC Plaza, No.233, North Tianhe Road, Guangzhou City, CHINA 510613

Phone +86 20 3877 3577

Fax +86 20 3877 3511

SUMITOMO CHEMICAL EUROPE S.A./N.V.

Woluwelaan, 57, B-1830 Machelen, BELGIUM

Phone +32 2 251 0650

Fax +32 2 251 2991

Web Site sumitomochemicaleurope.eu

SUMITOMO CHEMICAL EUROPE N.V.

Turkey Liaison Office, Barbaros Mah. Cigdem Sok. No:1, Agaoglu My Office K:10, D:44-45, 34746 Bati Atasehir, Istanbul, TURKEY

Phone +90 216 680 3334

Fax +90 216 680 1012

Disclaimer

All information contained in this document is provided in good faith and its sole purpose is to provide information regarding SCA's polymer products. This product catalogue is provided on an "as is" basis. SCA makes no representation, warranty, express or implied and assumes no liability as to the accuracy or completeness of any of the information contained in this product catalogue. The values shown are purely values measured on the product and are not to be considered as guaranteed specifications. Any information on this product catalogue should not be considered as a recommendation. Customer is responsible to ensure that SCA materials, whether used alone or mix with other materials, are suitable for the intended application. SCA expressly disclaims for any and all liability, including direct and indirect loss, consequential loss or damages based on or relating to the use or errors of and omissions of such information in this product catalogue. Information contained herein is NOT intended to announce product availability anywhere in the world. Please contact your nearest SCA representative for more detailed information.