

SS – 149: RCF 9 - POLYPROPYLENE STANDARD SPECIFICATION

- 1) **PRODUCT DESCRIPTION:** Natural color polypropylene homopolymer without plasticizers or colored master batches. The grade contains basic stabilization and optical improvement SLIP agent. Propylene is the only monomer used for producing the above-mentioned grade.
- 2) **APPLICATIONS:** Cast film for general purpose packages , with a low content of gels and extrusion applications.
- 3) **PROPERTIES:**

PROPERTIES	UM	LIMITS	TEST METHOD
APPEARANCE:	-	Uniform color granules without extraneous matter.	VISUAL
PHYSICAL			
Melt Flow Index ⁽³⁾ (230 °C / 2.16 kg)	g/10min	8,00 - 10,00	ISO 1133 B
Density at 23 °C ^(1,2)	g/cm ³	0,905 - 0,917	ISO 1183
MECHANICAL ⁽¹⁾			
Yield Strength ⁽³⁾ (23 °C, v=50mm/min)	MPa	Min. 34,0	ISO 527/1,2
Yield stress ⁽³⁾ (23 °C, v=50mm/min)	%	Min. 7,00	ISO 527/1,2
Flexural Modulus ⁽³⁾ (23 °C, v=2mm/min, secant)	MPa	Min. 1400	ISO 178
IZOD Impact Strength ⁽³⁾ (23 °C, slotted specimen)	KJ/m ²	Min. 3	ISO 180/1A
MECHANICAL FILM ⁽⁴⁾			
Tensile Strength Break (MD) ⁽²⁾ (23 °C, v=500mm/min)	MPa	min. 20	ISO 527/3
Tensile Elongation at break (MD) ⁽²⁾ (23 °C, v=500mm/min)	%	min. 350	ISO 527/3
OPTICAL PROPERTIES ⁽⁴⁾			
Haze	%	max. 15	ASTM D1003
Gloss (45°C)	UL	min. 50	ASTM D 2457
THERMAL ^(1,2)			
VICAT Softening Temperature ⁽²⁾ (A /50°C/h/10N)	°C	Min. 150	ISO 306/A
Heat deflection temperature ⁽²⁾ (B/120/0.46Mpa)	°C	Min. 100	ISO 75 B

Note:

- 1) The medium value of the mechanical and thermal properties is measured on the standard samples made by injection process (ISO 3167/ ISO 1873-2) conditioned at room temperature (ISO 291)
- 2) Periodical tests
- 3) Test on lots
- 4) Film Thickness - 40µm

ADDITIONAL INFORMATIONS:

- The monomers and additives used to produce this product are accepted to be used in accordance with the requirements of Regulation 10/2011/EC, relating to plastic materials and articles intended to come into contact with foodstuffs.

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- Processing information:
 - Recommended melt temperature: 200-230°C;
 - Terminal profile recommended for extrusion: 200-280°C depending on the type of equipment.

4) **Quality control:** Control is done on lots.

-Each lot will have max 200 tons. The lot will contain product of the same grade.

-During test operation, the product must comply all the parameters depicted in this standard specification.

-In case of litigation, the control of the quality will be done in the presence of the client representative, using the samples kept for those cases. The samples will be taken in accordance with the sampling procedure.

NOTE: All tests will be performed using the supplier's testing machines

5) **Sampling procedure:**

- Sampling will be done continuously during the lot formation.

- The initial samples will be mixed in order to homogenize it and the quantity of sample will be reduced by the "quarter method" to around 2 kg.

- The bags containing the samples are sealed and labeled.

NOTE: One sample is analyzed in the laboratory of the supplier, and the other will be kept three months after delivery, for control in case of litigation.

6) **DELIVERY:** CP4 Euro pallets (1375 kg PP/pallet), big-bags (1000 kg)

7) **GUARANTEE:** The product is guaranteed 3 months after delivery under the recommended "handling, transport and storage" conditions according to "SAFETY DATA SHEET"-MSDS-01.

8) **VALABILITY:** The product is guaranteed 6 months after production data, under the recommended "handling, transport and storage" conditions, according to MSDS-01 .The valability can be extended by a new inspection and evaluation of the quality.

9) **DOCUMENTS:** Certificate of conformity /Test report

10) **HANDLING, STORAGE AND TRANSPORT INFORMATION:** According to "SAFETY DATA SHEET" - MSDS - 01. If polymer is stored in conditions of high humidity and fluctuating temperatures, then atmospheric moisture can condensate inside the packing. In this case it is recommended to dry the pellets before use. During the storage, polypropylene should not be exposed to UV radiation. Producer does not take any responsibility for damage caused by inadequate storage.

11) **OTHER INFORMATIONS:**

The MSDS is available by Sales Marketing Rompetrol Refining offices for the customers .The MSDS contains necessary information in order to ensure customers' own safe in handling and processing activity.

The information below is related only to the delivered product.

Safety

Polypropylene is an inert commercial polymer and under normal handling induces no hazard. Product storage must be in accordance with MSDS procedure. The working people should avoid skin or eyes contact with molten polymer. As a minimal precaution to prevent eyes injury, safety glasses are indicated.

Fabrication areas should be well ventilated. Workplace environments should be kept clean and free of dust.

Fire hazard

Polypropylene is a combustible substance, but under normal storage conditions there is no ignition hazard. In contact with flame it becomes soft, flows, ignites and burns with a light flame until exhausting (if it isn't stabilized with a flame retardant agent). Therefore it has to be handled and

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stored avoiding contacts with open flames or other ignition sources. While burning, it releases high heat and a dense black smoke. In closed areas, fire fighters must use self-contained breathing apparatus.

Recycling

Polypropylene is a recyclable material. It is recommended to recycle production rejects and wastes instead of disposal.

Disposal

Disposal of any wastes should respect all national and local valid regulations. The below information are related to polypropylene homopolymer. The influence of the additives, fillers or other materials added by buyers must be taken into consideration using the related documentation. Polypropylene homopolymer can be disposed by inter or by controlled incineration, respecting valid regulations regarding gaseous emission or solid particles discharges. Due to the high level of heat enduced, incineration has to be done only in dedicated units. In case of interring: polypropylene is inert, does not degrade quickly, form a strong and permanent soil base and does not release gases or other compounds known to pollute water resources.

The mission assumed by Rompetrol Refining is to build a strong partnership supplier/customer. Assuming this purpose, Rompetrol Refining intents to offer products of high quality for satisfaction of all customers' needs and expectations, to keep permanently contact with clients in order to acknowledge processing troubleshooting, to ensure technical support to solve them, to develop new products for existing or potential markets. Rompetrol Refining recognizes community concerns regarding his potential impact activity on the environment and therefore encourages his customers to review their processes from the human health and environment point of view. In order to prevent using the products in manners for which they are not intended or tested, Rompetrol Refining offer to its customers product literature, including suitable Material Safety Data Sheet, that should be consulted prior to use its products.

NOTE: We do not undertake any responsibility or liability for using Rompetrol Refining products for other purposes than the ones recommended in this standard specification. It is the customer's responsibility to inspect and test our products in order to assure himself as to their suitability for his intended use.

NOTE REGARDING MEDICAL APPLICATION RESTRICTIONS: Rompetrol Refining does not recommend any company product for applications that involve human tissues or internal fluids contacts - regardless of the contact length of time, for cardiac devices, for medical device components that support human life, as well as for applications that have connections with human reproduction.