

SS – 87: H.AS HIGH DENSITY POLYETHYLENE STANDARD SPECIFICATION

- 1) **PRODUCT DESCRIPTION:** High density polyethylene homopolymer and/or copolymer, with basic stabilization. Ethylene and/or propylene/buthene are used in order to produce H.AS grade; there are not used plasticizers or coloured masterbatches. The product has natural color.
- 2) **APPLICATIONS:** injection molding for general purpose articles.
- 3) **PROPERTIES:**

PROPERTIES	UM	LIMITS	TEST METHOD
ASPECT:	-	Cylindrical granules with colour and dimension variations	VISUAL
CONTAMINATION⁽²⁾	%	max 1	VISUAL/GRAVIMETRIC
PHYSICAL			
Melt flow index ⁽¹⁾ (190 °C/ 2.16 kg)	g/10min	0.1-22	ISO 1133 B

Note:

- 1) Tests on batches.
- 2) Contamination: granules which do not comply with the appearance conditions, colored, expanded, unmelted, oxidizes, long and cluster granules

ADDITIONAL INFORMATIONS:

- We confirm that our product fulfills requirements regarding European Regulation (UE) No. 10/2011 relating to plastic materials and articles intended to come into contact with food stuff/ drinking water, with all subsequent ammendments.
- Processing information:
 - Recommended melt temperature: 180-240°C;
 - Thermal profile recommended for injection: 180-240°C depending on the type of equipment.

- 4) **QUALITY CONTROL:** Control is done on batches.
 - Each lot will have max 50 tons.
 - During testing, the product must comply all the parameters depicted in this standard specification.
 - In case of litigation, the control of the quality will be done using the samples kept for these 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 according to the sampling procedure during packing of the batch.
 - The samples will be mixed for homogenization and the quantity of sample will be reduced by the "quarter method" to minimum 5 kg.
 - One sample is analyzed in the laboratory of the supplier, and the other sample will be kept three months after delivery, for control in case of litigation.
 - The sample is sealed and labeled.
- 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-04.
- 8) **VALABILITY:** The product is guaranteed 12 months after production date, under the recommended "handling, transport and storage" conditions, according to MSDS-04. 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 - 04. During storage the polymer must not be exposed to UV radiations. 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 integrated management system of quality – environment – health and safety is certified by DNV – GL according to ISO 9001, ISO 14001 and OHSAS 18001

The information below is related only to the delivered product.

Safety

High density polyethylene 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

High density polyethylene 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 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

High density polyethylene 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 High density polyethylene homopolymer/copolymer. The influence of the additives, fillers or other materials added by buyers must be taken into consideration using the related documentation. High density polyethylene homopolymer/copolymer 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: High density polyethylene 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 intends 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.