

## TECHNICAL DATA SHEET

SPECIFICATIONS : RE-GPPS - low impact polystyrene granulate, colour: straw.

Romanian manufacturer

Chemical and physical data:

### DATA SHEET

D.S. nr 460

### RECYCLED POLYSTYRENE

Edition: 1

(extracted from TS 210/2012)

Date:11.2012

### SECTION 1. GENERAL

Product Name: Recycled polystyrene form the treatment of WEEE.

Applications: In recipes for processes of extrusion, injection allowing the reintroduction of recycled plastics.

Classification. Types. Notation. Recycled polystyrene obtained by successive separations from WEEE treatment;

Are classified into two types:

-type M, in the form grinding;

-type G, in the form granule.

Recycled polystyrene notation is as follows:

PS polystyrene followed by M or G to indicate type: grinding or granules and number technical specification.

Example of notation: PS- M or PS- G , TS nr. 210 / 2012.

### SECTION 2. PROPERTIES

Typical Physical:

	Characteristics	MU	Test Method	PS -M	PS -G
<b>2.1</b>	<b>MANDATORY REQUIREMENTS</b>				
<b>2.1.1</b>	<b>Color</b>		visual	monochrome or color mixture	
<b>2.1.2</b>	<b>Notched impact strenght Izod</b>	KJ/mp	ASTM 256	-	min. 1.9
<b>2.1.3</b>	<b>Melt Flow Index (200, 5kg)</b>	g/10min	SR EN ISO 1133	1- 6.5	1- 6.5
<b>2.1.4</b>	<b>Form</b>	-	visual	grinding	granule
<b>2.1.5</b>	<b>Particle size</b>	mm	SR EN 15346, annex E, or SR EN 15348, annex A	over 15 – max. 1% under 1,5 – max. 2%	Diameter:2,3 – 3,6 Length:3,2 – 4,2
<b>2.1.6</b>	<b>Content in basic polymer (PS)</b>	%	Infrared Analysis	min. 85	-
<b>2.1.7</b>	<b>Density</b>	Kg/mc	SR EN ISO 1183-1,methodA	0,95 - 1,2	0,95 - 1,2
<b>2.2</b>	<b>OPTIONAL REQUIREMENTS</b>				
<b>2.2.2</b>	<b>DHT</b>	°C	SR EN ISO 75	-	min. 85

			ASTM 648		
2.2.3	<b>Bulk density</b>	Kg/mc	SR EN ISO 60	0,420 – 0,550	0,530 – 0,650
2.2.4	<b>Ash</b>	%	SR EN ISO 3451	0,5 - 15	max. 15
2.2.5	<b>Flexural Strength</b>	MPa	SR EN ISO 178 ASTM 7901	-	min. 30
2.2.6	<b>Tensile Stress at Yield</b>	MPa	SR EN ISO 527 ASTM 638	-	min. 20
2.2.7	<b>Tensile Strain at Yield</b>	%	SR EN ISO 527 ASTM 638	-	min. 2
2.2.8	<b>Tensile Modulus</b>	MPa	SR EN ISO 527 ASTM 638	-	min. 1800
2.2.9	<b>Flexural modulus</b>	MPa	SR EN ISO 527 ASTM 638	-	min. 1400
2.3.0	<b>Humidity (weight loss 105°C)</b>	%	SR EN 1099 or STAS 5800	max. 0,2	max. 0,2

### SECTION 3. PACKING. MARK. TRANSPORT. STORAGE. DELIVERY.

**3.1. PACKING:** PP container, packaging or otherwise agreed with the client.

**3.2. MARK :** Recycled polystyrene packaging came appliances is marked by labeling with the following information: manufacturer's name, product name, type, quantity, lot, date of packaging, packer name, code internal body control (Technical Quality Control).

**3.3. TRANSPORT:** With clean vehicles covered to prevent impurities.

**3.4. STORAGE:** The product is stored in covered, ventilated, clean, dry place away from sunlight or sources of heat and humidity.

**3.5. DELIVERY:** products are accompanied by commercial documents and quality.

### SECTION 4. ENVIRONMENTAL REQUIREMENTS, OCCUPATIONAL HEALTH AND SAFETY.

Environmental impact, removing packaging and products at end of life, impact on occupational health and safety etc.

**Recycled polystyrene** from waste home appliances is the result of processes of recovery of materials destined to save resources, minimizing noxious emissions into air, water and soil, as well as negative effects on human health.

In normal conditions, the processes of injection, extrusion does not affect the environment, health and human security. Technological waste results in turn can be recycled.

Application: RE-GPPS is used as a raw material to produce: packaging for food and drinks, disposable dishes, electrotechnical and electronic products, toys. May be used in automotive industry, furniture production, construction industry and for insulation.

**Packing:** big bags.

**Quantity:** 20-22 net tons for the car.

Measurements were performed on representative samples. The recipient is obliged to assess the degree of usefulness of the granular in production.