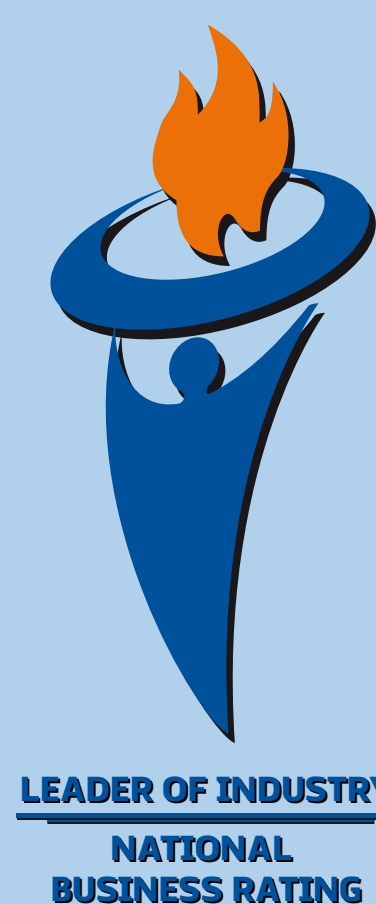


# CATALOGUE

of secondary polymeric raw material

## LI<sup>ON</sup> RECYCLING Ukraine



**Leader of industry in 2012-2014  
Under National Business Rating**

*The company affiliates the UKRVTORMA Presidium of the Association of secondary raw material procurers and processors, the Club of Packers Association, is a member of Ukrainian Chamber of Commerce and Industry.*

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**LI<sup>ON</sup>**  
**RECYCLING**  
Ukraine





**Primary LDPE regranulate**  
(prime grade, transparent)

✦ *Obtained from process waste and clean primary film. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3/10 min.  
Granules are bright and transparent.

➡ ***Films, poly bags from 15 μm.***



**Primary LDPE regranulate**  
(prime grade, white)

✦ *Obtained from process waste and clean primary film of white color. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3/10 min.  
Granules are bright and white.

➡ ***Films, poly bags from 15 μm.***



**Primary LDPE regranulate**  
(1st grade, transparent)

✦ *Obtained from process waste and clean primary film. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are bright, transparent and 1 tint darker than prime grade.

➡ ***Films, poly bags from 15 μm.***



**Primary LDPE regranulate**  
(1st grade, by colors)

✦ *Obtained from clean primary color film. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are divided by color.

➡ ***Films, poly bags from 20 μm.***



**Primary LDPE regranulate**  
(2nd grade, transparent)

✦ *Obtained from clean primary and secondary film. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are sandy and transparent.

➡ ***Films, poly bags from 25 μm.***



**LDPE regranulate**  
(grey/black)

✦ *Obtained from secondary colored film. Undergone cleaning from foreign materials, washing, agglomeration and granulation. Dark and black granule.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are dark and colored.

➡ ***Films, poly bags from 60 μm. Manufacturing of bitumen/ruberoid, water and vapor barriers and other products.***



**Primary LDPE regranulate**  
(3rd grade, transparent)

✦ *Obtained from secondary film. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are dark and transparent.

➡ ***Films, poly bags from 40 μm.***



**LDPE+HDPE regranulate**  
(Pipe composite)

✦ *Obtained from secondary LDPE and HDPE. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌞ Filtration — two grids P-56.  
Fluidity (melt flow index) is 0.7 g/10 min. Granules are black.

➡ ***Applied in pipe making.***



**Primary LLDPE regranulate**  
(Stretch film)

✦ *Obtained from washed stretch film. Undergone sorting, washing, cleaning from foreign materials, agglomeration and granulation.*

⌞ Filtration — grid P-64.  
Fluidity (melt flow index) is 1.9 g/10 min.

➡ ***Films from 40 μm, molding of consumer goods, as an additive to material compositions. Also intended, in particular, for manufacturing of laminated and stretching films. The most widely used in production of stretch films for mechanical and manual packing.***



**LDPE + HDPE agglomerate**  
(For molding compositions)

✦ *Produced by agglomeration of LDPE and HDPE film waste.*

⌞ Fluidity (melt flow index) is 1.9/10 min.

➡ ***Polymer — sand tile, paving tile, euro ruberoid, garden manholes, polymeric borders.***



**LLDPE regranulate**  
(Stretch film)

✦ *Obtained from washed stretch film. Undergone sorting, washing, removal of foreign materials, agglomeration and granulation.*

⌞ Filtration — grid P-56.  
Fluidity (melt flow index) is 1.9 g/10 min.

➡ ***Polymer — sand tile, paving tile, euro ruberoid, garden manholes, polymeric borders, consumer goods, used to increase elasticity and glossiness (as an additive)***



**LLDPE regranulate**  
(Stretch film, molding)

✦ *Manufactured of stretch film. Undergone sorting, removal of foreign materials, agglomeration and granulation.*

⌞ Filtration — grid P-48.  
Fluidity (melt flow index) is 1.9 g/10 min.

➡ ***Polymer — sand tile, paving tile, euro ruberoid, garden manholes, polymeric borders, consumer goods, used to increase elasticity and glossiness (as an additive).***





**Primary HDPE regranulate**  
(Extrusion, white/transparent)

✦ *Obtained from process waste, clean primary film/HD bags. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.24/10 min. Granules are bright and white.

➡ ***Films, customized poly bags for supermarkets (rustling bags)***



**HDPE regranulate**  
(Extrusion, grey/black)

✦ *Obtained from process waste, clean primary film/HD bags. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.24/10 min. Granules are bright.

➡ ***Films, Boss/BMW poly bags, garbage bags (rustling bags)***



**HDPE regranulate**  
(Extrusion, white blowing)

✦ *Obtained from process waste and rejects of blowing vessels. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.35/10 min. Granules are bright and white.

➡ ***Manufacturing of pipes, poly bags and blown vessels***



**HDPE regranulate**  
(Extrusion, grey blowing)

✦ *Obtained from process waste, rejects of blowing vessels and pipe making. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.4g/10 min.

➡ ***Manufacturing of pipes and blown vessels***



**HDPE regranulate**  
(Extrusion, blowing by colors)

✦ *Obtained from process waste and clean primary film/HD bags. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.24 g/10 min. Granules are divided by color.

➡ ***Films, customized poly bags for supermarkets (rustling bags).***



**HDPE regranulate**  
(Extrusion, black blowing)

✦ *Obtained from process waste, rejects of blowing vessels and pipe making. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.4 g/10 min.

➡ ***Manufacturing of pipes and blown vessels***



**HDPE regranulate**  
(Extrusion, grey/black blowing)

✦ *Obtained from process waste and rejects of blown vessels. Undergone cleaning from foreign materials, washing, agglomeration and granulation.*

⌋ Filtration — two grids P-56.  
Fluidity (melt flow index) is 0.35 g/10 min. Granules are divided by color.

➡ ***Manufacturing of pipes, poly bags and blown vessels.***



**Regranulate PE 100 HDPE**  
(Extrusion, black)

✦ *Obtained from process waste and rejects of primary HDPE pipes.*

⌋ Filtration — two grids P-72.  
Fluidity (melt flow index) is 0.3 g/10 min. Granules are black.

➡ ***Applied in pipe making.***



**Primary crushed HDPE**  
(Molding, white)

✦ *Manufactured by crushing of process waste when molding and undergone 2 cycles of metal separation providing maximum removal of foreign elements from raw material.*

⌋ Fluidity (melt flow index) is 22 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**Crushed HDPE**  
(Molding, by colors)

✦ *Manufactured by crushing of process waste when molding and undergone 2 cycles of metal separation providing maximum removal of foreign elements from raw material.*

⌋ Fluidity (melt flow index) is 22 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**Crushed HDPE**  
(Molding, white)

✦ *Manufactured by crushing of molded products and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*

⌋ Fluidity (melt flow index) is 22 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**Crushed HDPE**  
(Molding, black)

✦ *Manufactured by crushing of molded products and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*

⌋ Fluidity (melt flow index) is 22 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***





**Crushed PP**  
(Molding, transparent)

↗ *Manufactured by crushing of process waste when PP molding and extrusion (medicine).*

⌋ Fluidity (melt flow index) is 37 g/10 min. Fraction is 5-8 mm.

➡ ***Injection molding***



**PP regranulate**  
(Molding, white/transparent)

↗ *Manufactured by granulation of process waste when PP molding and extrusion.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 37 g/10 min.

➡ ***Injection molding, extrusion.***



**Primary PP agglomerate**  
(Molding, white)

↗ *Manufactured by agglomeration of process waste when PP molding and extrusion.*

⌋ Fluidity (melt flow index) is 4.5 g/10 min.

➡ ***Injection molding***



**PP regranulate**  
(Extrusion/molding, by colors)

↗ *Manufactured by granulation of process waste when molding and extrusion of PP A4 goods.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 4.5 g/10 min.

➡ ***Injection molding, extrusion***



**Crushed PP**  
(Molding, white)

↗ *Manufactured by crushing of molded consumer goods and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*

⌋ Fluidity (melt flow index) is 8.7 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**PP regranulate**  
(Extrusion, molding, grey)

↗ *Manufactured by granulation of process waste when molding and extrusion of PP A4 goods.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 4.5 g/10 min.

➡ ***Injection molding, extrusion***



**Crushed PP**  
(Molding, by colors)

↗ *Manufactured by crushing of molded consumer goods and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*

⌋ Fluidity (melt flow index) is 8.7 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**PP regranulate**  
(Extrusion/molding, black)

↗ *Manufactured by granulation of process waste when molding and extrusion of goods of PP A4.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 4.5 g/10 min.

➡ ***Injection molding and extrusion***



**Crushed PP**  
(Molding, black)

↗ *Manufactured by crushing of molded consumer goods and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*

⌋ Fluidity (melt flow index) is 3.6 g/10 min, fraction is 5-8 mm.

➡ ***Injection molding***



**Crushed PP**  
(Molding, black)

↗ *Manufactured by granulation of process waste when PP molding.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 3.6 g/10 min.

➡ ***Injection molding***



**PP agglomerate**  
(Molding, grey/black)

↗ *Manufactured by agglomeration of film waste of polypropylene.*

⌋ Fluidity (melt flow index) is 3.8 g/10 min.

➡ ***Injection molding***



**PP copolymer regranulate**  
(Molding, black)

↗ *Manufactured by granulation of process waste when manufacturing of batteries.*

⌋ Filtration — two grids P-72. Fluidity (melt flow index) is 4.5 g/10 min.

➡ ***Injection molding***





**Crushed PC**  
(Molding, transparent)

- ✦ *Manufactured by crushing of process waste and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding.***



**Crushed PC**  
(Molding, blue)

- ✦ *Manufactured by crushing of process waste when production of water bottles and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding.***



**Soft crushed PVC**  
(Molding, transparent)

- ✦ *Manufactured by crushing of process waste when production of items for medicine and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding***



**PA agglomerate**  
(PA-6, molding/extrusion, white/by colors/black)

- ✦ *Manufactured by agglomeration of process waste when production of PA-6 goods.*
- └ Fraction is 4-5 mm.
- ➡ ***Injection molding, extrusion***



**Crushed PS**  
(Process waste, molding, transparent)

- ✦ *Manufactured by crushing of process waste when production of goods for medicine and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding***



**PS regranulate**  
(Impact materials, molding/extrusion, white/by colors/black)

- ✦ *Manufactured by granulation of process waste when production of household appliances and polystyrene goods.*
- └ Filtration — two grids P-72.
- ➡ ***Injection molding***



**Crushed ABS**  
(Molding, grey)

- ✦ *Manufactured by crushing of process waste and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding***



**Crushed PS**  
(Impact materials, molding, white/beige)

- ✦ *Manufactured by crushing of process waste and undergone 2 cycles of metal separation providing maximum removal of foreign elements.*
- └ Fraction is 5-8 mm.
- ➡ ***Injection molding***



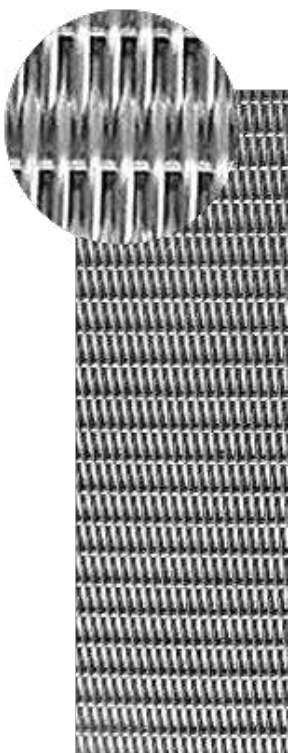
**Metalized polymer fluff**  
(ferrous metal)

- ✦ *Removed when crushing due to neodymium magnets and foreign bodies and garbage removed from material when processing through dry cleaning unit.*



**Metalized polymer waste**  
(nonferrous metal)

- ✦ *Removed when crushing due to passing of material through electronic unit of metal separation and dust and fluff removed from metal when processing.*



**Grid P-72**

- ✦ *Manufactured by Frunze Plant of Zaporozhye used for granulation of extrusion material.*



**Grid P-48**

- ✦ *Manufactured by Frunze Plant of Zaporozhye used for granulation of molding materials.*



## OUR STANDARDS

### PRODUCTION OF GRANULES

Material undergoes sorting procedure.

The obligatory washing of raw feedstock by washing material (German origin) is realized prior to granulation.

The grid block 2\*P72 (cell size <1µm) is used only for granule production.

The replacement of grid is realized upon the clogging, every 50 kg max.

After the replacement of filtration grids clogged melt is reprocessed.

### PRODUCTION OF CRUSHED MATERIAL

The availability of at least 2 neodymium magnets at the areas of material output in order to remove the ferrous metal is obligatory.

The availability of electronic unit of metal separation in order to remove non-ferrous metal (aluminum, copper, etc) is obligatory.

The availability of raw material dry cleaning block in order to output material without dirt, dust, fluff, polymer fluff, millboard, moisture.

Crushing fraction is 5-8 mm.

Knives are always sharp in order to avoid crushing of material into fine fraction — fluff.

During switching of material the crushing machine is cleaned in order to avoid the mixture of different types of polymer or mixture of different colors.

### OUR AIM IS:

To protect our planet resources by means of useful secondary use.

### OUR PURPOSE IS:

To explore the most useful ways of procurement and processing of secondary raw materials.

To find successful ways of its use.

To achieve the purity and uniformity of secondary raw materials identical to fresh raw materials.

To provide high quality secondary raw materials anywhere in the world to completely meet the customer requirements.

### LION RECYCLING UKRAINE MEANS:

- Consistent quality and material uniformity
- Prompt and reliable deliveries
- Responsibility and decency
- Popular products are in stock



### WORKING WITH LION RECYCLING UKRAINE YOU GET:

#### The possibility of gaining additional profit.

Using uniform secondary materials of consistent quality, you ensure ongoing savings and start earning more.

#### Consistent quality.

Thanks to reliable sources of recyclables and strict control of recycling process at all stages, we guarantee complete absence of impurities, metals and litter, full compliance with samples.

#### Material uniformity.

It is a guarantee that you can use secondary materials as fresh raw materials.

#### Responsibility and decency.

Raw materials ordered by you will comply with declared properties and samples, all arrangements will be fulfilled.

#### Promptness.

Your orders are being executed on time, what allows you to work successfully and smoothly without interruptions.

#### Reliability.

Working with trusted supplier, you get time to focus on your business, and not on finding alternative sources of raw materials.

#### Availability in stock.

You can get raw material in sufficient quantity at reasonable time, just when you need it.

You can order a demonstrative catalogue with actual samples and description of all materials produced by us.

You can order free test samples.

At your request, our qualified employees can make onsite presentation, where you will see all the advantages and benefits of using secondary materials at your company.

You can request a visit of process planner, who will assist you in adjusting production to secondary materials.

You can place order in any convenient way by contacting our managers or through the website.

To fulfil your order, we will select the best option for prompt and inexpensive delivery.

You can get the necessary advice from our qualified experts on the use of secondary materials at any time convenient for you.

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TO BE OUR PARTNER — TO HAVE STABLE AND PROFITABLE BUSINESS