



Warsaw 2023

# Production of major industrial products in November 2023





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**Content-related works**

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## Preface

This publication contains data on the production of major products or assortment groups representing particular divisions of the Polish Classification of Goods and Services (PKWiU 2015) for Section B "Products of Mining and Quarrying" and section C "Manufacturing Products" obtained in the monthly survey.

The aim of the publication is to present changes in the production of industrial products based on data expressed in physical units of measure in particular months of the last two years. Selection of presented industrial products reflects the needs of a wide range of users, including among others, government administration, producers' associations and individual producers and scientific research institutions.

Presenting this publication we hope that the data will be a valuable source of information on production of the most significant products in Poland. At the same time, we will appreciate any comments and suggestions regarding the scope of data contained in this publication, which will allow for its better adaptation to the needs of users.

Taking the opportunity, we would like to thank all the respondents participating in the monthly survey on the production of industrial products, carried out on the P-02 form "Report on production and inventory of industrial products". Your commitment contributed to compiling this publication.

Director  
of Enterprises Department

/-/ Katarzyna Walkowska

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## Symbols

Symbol	Description
(-)	magnitude zero
(0)	magnitude not zero, but less than 0.5 of a unit
(.)	data not available, classified data (statistical confidentiality) or providing data impossible or purposeless
(*)	revised data
of which	indicates that not all elements of the sum are given

## Main abbreviations

Symbol	Description
Cu	copper
dam <sup>3</sup>	cubic decametre
GWh	gigawatt-hour
hm <sup>3</sup>	cubic hectometre
km	kilometer
MVA	megavolt-ampere
MW	megawatt
PLN	Polish zloty
thousand hectolitre 10%	thousand hectolitre of converted volume of product with 10% component content



## Introduction

The survey of the production of industrial products in physical units of measure complements the survey of sold production of industry, and allows for monthly assessment of trends of domestic production. The publication contains data on manufactured production in Poland for 462 products or assortment groups representing major fields of industrial production.

The data were prepared on the basis of a monthly product survey carried out on the P-02 form "Report on production and inventory of industrial products". The survey covers enterprises manufacturing industrial products regardless of their type of business activity, with number of persons employed exceeding 49 persons.

Products or assortment groups are presented according to the PRODPOL nomenclature based on the Polish Classification of Goods and Services (PKWiU 2015) and the European PRODCOM List. In some cases, products are presented according to additional groupings, constituting the sum of selected items from the PRODPOL nomenclature. Data on manufactured production of products related to the prevention of spreading / combating COVID-19 previously presented in a separate table are included in table 1 and table 2.

Table 1 presents the data on manufactured production of products in November 2023 along with production dynamics indicators in relation to the previous month and to corresponding period of the previous year.

Table 2 presents the data on manufactured production of products retrospectively, by the months of the current and previous year.

Table 3 presents the data on sold production of products in November 2023 along with production dynamics indicators in relation to the previous month and to corresponding period of the previous year.

Table 4 presents the data on sold production of products retrospectively, by the months of the current and previous year.

Indices shown in table 1 and table 3 take account of corrections made for previous periods.

The sum of data from particular months in table 2 and table 4 does not always have to be consistent with the cumulative data (i.e. from the beginning of the year to the end of the reporting month), because minor adjustments of up to 3% at country level for a given product are taken into account only in cumulative data. Data corrected in relation to the data presented in the previous month are marked with an asterisk.

The reasons of differences that may occur between the amount of manufactured production and sold production are presented in the Methodological notes.

## Executive summary

In November 2023, the product survey carried out on the P-02 form "Report on production and inventory of industrial products" covered more than 7,000 statistical units with 50 or more persons employed that manufactured products specified in the PRODPOL nomenclature for monthly surveys in 2023.

The publication presents data on manufactured production for 462 products and assortment groups and on sold production for 308 products and assortment groups. In November 2023, manufactured production of 183 items and sold production of 155 items was higher than in November 2022. Decrease was noted on manufactured production for 264 items and on sold production for 145 items. Data on production of slaughter products of pigs, wheat bread; plastic windows and doors, barbed wire and barbed wire entanglements made from steel or steel wire and ploughs is not published as it was not possible to obtain production data from some economic entities.

### MANUFACTURED PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. **In November 2023 in comparison to November 2022**, in the divisions covering energy raw materials production decreased of e.g. lignite (by 14.6%). In the divisions *Food products and Beverages* production decreased of e.g. vinegar (by 33.9%), edible rock salt (by 30.4%), barley groats and meal (by 25.1%), fruit wines (by 15.4%), rye flour (by 15.3%). In the divisions *Wearing apparel and Leather and related products* production decreased of e.g. jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 54.5%), women's or girls' suits and ensembles, not knitted (by 49.5%), men's or boys' overcoats and similar articles, knitted or crocheted (by 40.5%), footwear with uppers of textile materials (by 39.0%), panty hose and tights (by 36.5%). In the divisions *Wood and products of wood and Paper and paper products* production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 44.9%), fluting paper (by 30.7%), non-coniferous sawnwood (by 24.3%), wooden flooring materials (by 17.8%), sacks and bags of paper (by 17.8%). In the division *Chemical products* production decreased of e.g. butadiene-1,3 (by 68.3%), ethylene (by 67.3%), sodium hydroxide in aqueous solution (by 58.7%), propylene (by 37.3%), pesticides and agrochemicals used in agriculture and forestry (by 33.1%). In the division *Rubber and plastic products* production decreased of e.g. tyres for lorries and buses (by 18.6%), tyres for agricultural machinery (by 14.7%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 6.9%). In the division *Other non-metallic mineral products* production decreased of e.g. ceramic ridge tiles (by 85.8%), structural-floor clay hollow bricks (by 69.2%), ceramic roof tiles (by 65.6%), sanitary fixtures of porcelain (by 32.7%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 27.9%). In the division *Basic metals* production decreased of e.g. brass (by 73.9%), copper plates, sheets and strip (by 50.7%), bronze (by 26.7%), seamless tubes (by 26.2%), copper and copper alloy bars, rods and profiles (by 15.1%). In the division *Fabricated metal products* production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 49.3%), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 39.7%), hand saws; blades for saws of all kinds (by 27.9%), aluminium doors (by 18.8%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 litres (by 18.0%). In the divisions *Computer, electronic and optical products and Electrical equipment* production decreased of e.g. outside aerials for radio or television reception excluding for satellite broadcast (by 46.3%), optical fibre cables (by 45.8%), nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron and other electric accumulators (by 37.2%), electric hobs for building-in (by 28.8%), gas meters (by 26.5%). In the division *Machinery and equipment* production decreased of e.g. machinery for construction, road and drainage work (by 77.2%), pick-up straw and fodder balers (by 35.5%), agricultural tractors (by 31.8%), scarifiers and cultivators (by 30.7%), concrete mixers (by 29.0%).

In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. sea-going boats for pleasure or sports (by 55.6%), bicycles (by 41.2%), containers for freight transport (by 22.2%). In the division *Furniture* production decreased of e.g. seats convertible into beds (by 14.8%), seats with wooden frames (by 10.9%).

In November 2023 in comparison to November 2022, production increase was recorded for, among others: woven fabrics of cotton, not of yarns of different colours, weighing  $\leq 200$  g/m<sup>2</sup>, for technical or industrial uses (by 300.0%), towels and similar articles of paper pulp, paper and cellulose wadding (by 172.8%), disinfectant wipes (by 131.5%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 92.9%), tyres for tractors (by 87.6%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 79.5%), wire of steel (by 78.4%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 75.5%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 73.5%), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by 71.6%), woven fabrics of carded wool or carded fine animal hair (by 71.4%), wire of aluminium (by 71.4%), reciprocating displacement compressors (by 70.8%), electric motors and generators, excluding traction motors (by 69.7%), buckwheat groats and meal (by 64.8%), rendered pork fat suitable for consumption (by 63.4%), plastic floor, wall, ceiling coverings (by 62.3%), frozen salt water fish (by 53.2%), rusks, toasted bread and similar toasted products (by 52.2%), rail goods wagons (by 51.7%), printed children's picture, drawing or colouring books (by 49.8%).

In November 2023 in comparison to November 2022, unchanged remained the production of men's or boys' shirts, not knitted, footwear with rubber, plastic or leather outer soles and leather uppers, and with a protective metal toe-cap, plastic sacks and bags and cash registers.

**Compared to October, in November 2023** manufactured production decreased for 299 products. In the divisions covering energy raw materials production decreased of e.g. hard coal (by 4.0%), petroleum oils and oils obtained from bituminous minerals (by 2.9%). In the divisions *Food products* and *Beverages* production decreased of e.g. tomato juice (by 35.9%), vegetable pickles (by 29.7%), non-alcoholic beer (by 28.0%), prepared meals and dishes based on vegetables (by 24.0%), frozen vegetables (by 23.0%), poultry cuts (by 20.8%), apple juice (by 20.1%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of e.g. women's or girls' overcoats and similar articles, not knitted (by 71.5%), women's or girls' overcoats and similar articles, knitted or crocheted (by 53.2%), women's or girls' suits and ensembles, not knitted (by 51.5%), unsplit bovine leather for shoes (by 33.7%), men's or boys' trousers, overalls and shorts, not knitted (by 29.1%), panty hose and tights (by 24.5%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 18.4%), fluting paper (by 14.8%), assembled parquet panels of wood other than for mosaic floors (by 13.1%), folding cartons, boxes and cases of non-corrugated paper or paperboard (by 12.1%), veneers (by 11.9%), wooden flooring materials (by 9.9%), napkins and napkin liners for babies (by 9.7%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. denatured ethyl alcohol with a vol. strength of 60% and more (by 35.9%), liquefied propane and butane (by 29.1%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 27.7%), paints, varnishes and similar coatings (by 27.6%), pesticides and agrochemicals used in agriculture and forestry (by 25.6%), rectified spirit (ethyl alcohol) (by 24.5%), asphalt (by 21.8%). In the division *Rubber and plastic products* production decreased of e.g. rigid tubes, pipes and hoses of polymers of vinyl chloride (by 23.4%), rubberised textile fabrics, except tyre cord fabric (by 22.9%), plates, sheet, film, foil of cellular polymers of styrene (by 20.1%), tableware and kitchenware of plastic (by 16.5%), rigid tubes, pipes and hoses of polymers of ethylene (by 15.3%), rigid tubes, pipes and hoses of polymers of propylene (by 13.1%), tyres for agricultural machinery (by 10.0%). In the division *Other non-metallic mineral products* production decreased of e.g. structural-floor clay hollow bricks (by 54.5%), sanitary

fixtures of porcelain (by 24.6%), bottles of colourless glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 23.2%), factory made mortars (by 22.4%), double glazed units (by 21.4%), ready-mixed concrete (by 21.2%). In the division *Basic metals* production decreased of e.g. brass (by 70.3%), cold-rolled steel sheet width 600 mm or wider (by 36.3%), copper plates, sheets and strip (by 32.3%), copper wire (by 21.8%), hot rolled steel products (by 20.7%), crude steel (by 16.3%). In the division *Fabricated metal products* production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 24.3%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 20.7%), aluminium doors (by 17.6%), food cans of tinsplate (by 13.6%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of e.g. air-cooled transformers (by 25.3%), refrigerators and freezers, including combined refrigerators-freezers (by 16.9%), computers (by 16.7%), lead-acid accumulators for motor vehicles (by 16.6%), optical fibre cables (by 16.4%), water meters (by 14.7%). In the division *Machinery and equipment* production decreased of e.g. vacuum pumps (by 76.7%), concrete mixers (by 69.2%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 57.1%), machinery for construction, road and drainage work (by 38.7%), fire extinguishers (by 21.7%), oil or petrol-filters for internal combustion engines (by 21.1%), machine tools for machining metals (by 20.1%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. rail goods wagons (by 25.1%), goods vehicles, with spark-ignition internal combustion piston engine; other goods vehicles (by 17.7%), sea-going boats for pleasure or sports (by 15.3%), containers for freight transport (by 10.7%), city/touring bicycles (by 5.8%).

Compared with the previous month, production increase was recorded for 148 products, among others for: other polyamides filament tow and staple fibres (by 85.7%), flax yarn (by 75.4%), dried grapes (by 73.3%), protective face shields (by 72.9%), woven fabrics of cotton, not of yarns of different colours, weighing  $\leq 200$  g/m<sup>2</sup>, for technical or industrial uses (by 71.4%), footwear (including waterproof footwear), incorporating a protective metal toecap, with outer soles and uppers of rubber or of plastics (by 66.7%), sugar (by 66.1%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 61.5%), uncoated, unbleached kraftliner (by 61.5%), edible rock salt (by 60.4%), women's or girls' jackets, not knitted (by 52.3%), millet groats (by 51.2%), chocolate buttons (by 50.1%), soda or sulphate wood pulp (by 48.1%), non-woven glass fibre webs, felts, mattresses and boards (by 48.1%), gas-electric cookers (by 47.0%), reciprocating displacement compressors (by 46.6%), muesli type preparations based on unroasted cereal flakes (by 46.1%), LED light bulbs (by 44.9%), woven fabrics of synthetic staple fibre (by 43.5%), kitchen and bathroom mixing valves (by 40.0%), articles of bedding of feathers or down (by 38.0%).

Production of toluene remained at the same level as in the previous month.

**Summarizing the manufactured production in the period January–November 2023**, compared with the corresponding period of the previous year, production increase was recorded for 145 products, among others for: electric conductors, for a voltage  $\leq 1\ 000$  V, fitted with connectors (by 62.1%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 61.4%), rusks, toasted bread and similar toasted products (by 60.9%), rail goods wagons (by 59.2%), animal or vegetable fats and oils and their fractions, hydrogenated, esterified, but not further prepared (by 58.8%), soap with disinfectant properties (by 58.4%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 57.2%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 56.0%), reciprocating displacement compressors (by 54.1%), woven fabrics of cotton, not of yarns of different colours, weighing  $> 200$  g/m<sup>2</sup>, for clothing (by 52.0%), road tractors for semi-trailers (by 47.9%), women's or girls' overcoats and similar articles, not knitted (by 47.8%), goods vehicles, with compression-ignition internal combustion piston engine (by 41.0%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 40.9%), lorries and road tractors for semi-trailers (by 40.3%), air-cooled transformers (by 35.5%), woven fabrics of

man-made filament yarns obtained from high tenacity yarn, strip or the like (by 35.2%), electric motors and generators, excluding traction motors (by 35.0%), textile floor coverings (by 34.3%), frozen salt water fish (by 33.9%), sugar (by 33.3%), lead-acid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by 31.4%), compressors for refrigeration equipment (by 31.2%), rugs (by 31.2%), paints and varnishes, based on polyesters, weight of the solvent more than 50% (by 30.0%), other prepared dishes and meals (by 30.0%), fire-fighting vehicles (by 29.7%).

In January - November compared with the corresponding period of the previous year, production decrease was recorded for 305 products, among others for: vacuum pumps (by 77.0%), food grinders, mixers and juice extractors (by 73.0%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 69.3%), ceramic ridge tiles (by 69.2%), structural-floor clay hollow bricks (by 65.9%), filament lamps of a power  $\leq 200$  W and for a voltage  $> 100$  V (by 65.5%), filament lamps (by 62.5%), men's or boys' overcoats and similar articles, knitted or crocheted (by 57.3%), outside aerials for radio or television reception via satellite (by 56.4%), assembled parquet panels of wood for mosaic floors (by 53.7%), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by 47.6%), bicycles (by 47.6%), woven fabrics of cotton, not of yarns of different colours, weighing  $\leq 200$  g/m<sup>2</sup>, for technical or industrial uses (by 43.1%), LED light bulbs (by 43.1%), women's or girls' trousers, overalls and shorts, not knitted (by 42.6%), footwear with uppers of textile materials (by 40.5%), copper plates, sheets and strip (by 40.1%), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by 39.9%), tents (including caravan awnings, temporary canopies and similar articles) (by 39.6%), non-refractory clay building bricks (by 39.5%), waterproof footwear, with uppers in rubber or plastics (by 39.1%), brass (by 39.1%), outside aerials for radio or television reception excluding for satellite broadcast (by 39.0%), polyvinyl chloride not mixed with any other substances (by 38.8%), woven fabrics of cotton, not of yarns of different colours, weighing  $> 200$  g/m<sup>2</sup>, for household linen or home furnishing textiles (by 38.5%).

Production of woven fabrics of carded wool or carded fine animal hair, cathodes and sections of cathodes of refined copper and mechanical ventilation apparatus, non-invasive was at the same level as in the corresponding period of the previous year.

## SOLD PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. **In November 2023 in comparison to November 2022** in the divisions *Food products* and *Beverages* production decreased of e.g. fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 36.9%), vodka (by 27.2%), crispbread (by 23.7%), vinegar (by 18.7%), soups and broths and preparations therefor (by 15.6%), rye flour (by 14.4%), canned poultry meat (by 13.3%), prepared feeds for farm animals (by 13.3%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of e.g. men's or boys' overcoats and similar articles, knitted or crocheted (by 48.7%), footwear with uppers of textile materials (by 41.7%), women's or girls' trousers, overalls and shorts, not knitted (by 40.5%), women's or girls' blouses and shirts, not knitted (by 36.4%), waterproof footwear, with uppers in rubber or plastics (by 27.7%), hosiery (by 25.4%), men's or boys' suits and ensembles, not knitted (by 25.3%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 49.8%), non-coniferous sawnwood (by 28.4%), veneers (by 25.6%), wooden flooring materials (by 20.7%), fluting paper (by 20.3%), sacks and bags of paper (by 16.6%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. sodium hydroxide in aqueous solution (by 50.7%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 38.7%), pesticides and agrochemicals used in agriculture and forestry (by 36.0%), rectified spirit (ethyl alcohol) (by 30.1%), motor oils (by 26.1%), liquefied propane and

butane (by 19.3%), asphalt (by 19.1%). In the division *Rubber and plastic products* production decreased of e.g. tableware and kitchenware of plastic (by 15.0%), tyres (by 12.8%), plates, sheet, film, foil of cellular polymers of styrene (by 10.0%). In the division *Other non-metallic mineral products* production decreased of e.g. bricks made of clay (by 90.7%), ceramic roof tiles (by 51.2%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 41.4%), ceramic ridge tiles (by 35.2%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 33.5%), porcelain or china tableware and kitchenware (by 32.0%), double glazed units (by 28.0%). In the division *Basic metals* production decreased of e.g. hot-rolled steel rods and bars (by 38.0%), refined unwrought lead (by 34.4%), flat cold-rolled steel products width less than 600 mm (by 14.0%). In the division *Fabricated metal products* production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 50.5%), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 40.9%), aluminium doors (by 18.5%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 17.5%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of e.g. electricity meters (by 46.1%), optical fibre cables (by 44.9%), gas meters (by 42.8%), multi-phase current motors, excluding traction motors (by 37.2%), television receivers (by 23.3%), refrigerators and freezers, including combined refrigerators-freezers (by 21.4%), lead-acid accumulators for motor vehicles (by 18.7%), domestic gas cookers with an oven (by 15.2%). In the division *Machinery and equipment* production decreased of e.g. machinery for construction, road and drainage work (by 62.4%), pick-up straw and fodder balers (by 43.1%), field sowers (by 39.0%), scarifiers and cultivators (by 28.1%), machine tools for machining metals (by 23.3%), loaders for general use in agriculture (by 21.8%), articulated link chain of iron or steel (by 19.5%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. city/touring bicycles (by 48.8%), sea-going boats for pleasure or sports (by 44.8%). In the division *Furniture* production decreased of e.g. seats with wooden frames (by 13.6%), seats convertible into beds (by 11.4%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 153.6%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 134.4%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 70.7%), woven fabrics of cotton weighing less than 200 g/m<sup>2</sup> (excluding gauze, denim and yarns of different colours) (by 69.8%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 69.3%), buckwheat groats and meal (by 62.9%), rusks, toasted bread and similar toasted products (by 62.8%), plastic floor, wall, ceiling coverings (by 62.0%), vehicle compression-ignition engines (by 57.5%), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 53.2%), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by 47.5%), millet groats (by 46.4%), potassic fertilizers (by 43.1%), electric motors and generators, excluding traction motors (by 40.9%), phosphatic fertilizers (by 36.1%), automatic drying machines (by 35.3%), basic pharmaceutical products (by 35.1%), other prepared dishes and meals (by 34.7%), dish washing machines (by 32.8%), articles of bedding of feathers or down (by 32.3%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 31.9%), internal combustion engines for vehicles (by 30.9%), sheets and strips of non-alloy steel coated with zinc (by 28.8%), men's or boys' trousers, overalls and shorts, not knitted (by 26.6%), nitrogenous fertilizers (by 26.6%), flat bars, rods and profiles of aluminium (by 25.9%), water meters (by 24.6%), chocolate buttons (by 24.3%), tomato juice (by 23.7%), liquid buttermilk (by 22.9%), wire of steel (by 22.6%), disinfectants put up in forms or packings for retail sale or as preparations or articles (by 21.5%).

**Compared to October 2023, in November 2023** sold production decreased for 207 products. In the divisions *Food products* and *Beverages* production decreased of e.g. beer (by 13.4%), poultry meat (by 12.4%), rye flour (by 11.9%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of e.g. panty hose and tights (by 27.7%), leather of bovine animals (by 26.8%), men's or boys' suits and ensembles, not knitted (by 23.3%). In the divisions

*Wood and products of wood* and *Paper and paper products* production decreased of e.g. veneers (by 27.5%), assembled parquet panels of wood for mosaic floors (by 22.0%), napkins and napkin liners for babies (by 11.4%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. asphalt (by 31.7%), liquefied propane and butane (by 29.9%), toilet waters (by 21.4%). In the division *Rubber and plastic products* production decreased of e.g. plates, sheet, film, foil of cellular polymers of styrene (by 26.3%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 17.9%), rigid tubes, pipes and hoses of polymers of ethylene (by 16.5%). In the division *Other non-metallic mineral products* production decreased of e.g. structural-floor clay hollow bricks (by 57.1%), bricks made of clay (by 47.3%), building bituminous felt (by 28.6%). In the division *Basic metals* production decreased of e.g. steel rods and flat bars (by 10.8%), flat cold-rolled steel products width less than 600 mm (by 8.8%), wire of steel (by 8.0%). In the division *Fabricated metal products* production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 21.4%), hand saws; blades for saws of all kinds (by 18.7%), aluminium doors (by 14.8%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of e.g. gas meters (by 36.1%), vacuum cleaners (by 30.0%), air-cooled transformers (by 23.1%). In the division *Machinery and equipment* production decreased of e.g. field sowers (by 31.5%), machinery for construction, road and drainage work (by 31.2%), machine tools for machining metals (by 23.5%). In the division *Other transport equipment* production decreased of e.g. city/touring bicycles (by 25.5%), rail goods wagons (by 25.1%), sea-going boats for pleasure or sports (by 24.1%).

Compared with the previous month, production increase was recorded for 94 products, among others for: pick-up straw and fodder balers (by 98.8%), women's or girls' trousers, overalls and shorts, not knitted (by 82.8%), millet groats (by 55.7%), chocolate buttons (by 48.2%), frozen salt water fish fillets (by 44.2%), syringes, with or without needles (by 40.8%), men's or boys' shirts, not knitted (by 37.2%), milk and cream powder (by 34.7%), public transport vehicles (by 31.7%), liquid buttermilk (by 30.7%), tomato juice (by 26.8%), fruit wines (by 23.3%), kitchen and bathroom mixing valves (by 22.6%), vegetable pickles (by 22.2%), reciprocating displacement compressors (by 17.4%), apple juice (by 17.2%), rectified spirit (ethyl alcohol) (by 16.9%), electric conductors, for a voltage > 1 000 V (by 16.2%), cash registers (by 14.5%).

Production of first-aid boxes and kits remained at the same level as in the previous month.

**In the period January - November 2023**, compared with the corresponding period of the previous year, production decrease was recorded for 215 products, among others for: bricks made of clay (by 92.8%), men's or boys' overcoats and similar articles, knitted or crocheted (by 60.1%), women's or girls' trousers, overalls and shorts, not knitted (by 56.2%), assembled parquet panels of wood for mosaic floors (by 54.6%), ceramic ridge tiles (by 53.2%), ceramic roof tiles (by 46.9%), woven fabrics of synthetic or artificial filament yarns (by 44.5%), single-phase current motors (by 42.7%), footwear with uppers of textile materials (by 39.6%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 37.0%), structural-floor clay hollow bricks (by 36.3%), city/touring bicycles (by 36.0%), autoclaved cellular concrete (by 34.9%), wooden flooring materials (by 34.7%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 34.6%), waterproof footwear, with uppers in rubber or plastics (by 34.2%), building blocks of light concrete (by 34.1%), disinfectants put up in forms or packings for retail sale or as preparations or articles (by 32.8%), chemical fibres (by 32.7%), porcelain or china tableware and kitchenware (by 32.6%), rotary displacement compressors (by 31.7%), phosphatic fertilizers (by 31.3%), products of heat insulation of mineral wools (by 30.8%), machinery for construction, road and drainage work (by 30.7%), pick-up straw and fodder balers (by 29.5%), other paper and paperboard for graphic purposes (by 28.7%), non-refractory clay building bricks (by 28.4%), nails (by 27.9%), rectified spirit (ethyl alcohol) (by 27.6%), domestic gas cookers with an oven (by 27.6%), twine, cordage, rope and cables, of jute or other textile bast fibres (by 26.8%).

**In January - November 2023**, compared with the corresponding period of the previous year, production increase was recorded for 86 products, among others for: sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 150.9%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 112.5%), electric conductors, for a voltage  $\leq$  1 000 V, fitted with connectors (by 62.9%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 61.3%), rail goods wagons (by 60.9%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 55.5%), rusks, toasted bread and similar toasted products (by 47.9%), reciprocating displacement compressors (by 45.1%), basic pharmaceutical products (by 39.1%), air-cooled transformers (by 33.8%), women's or girls' overcoats and similar articles, knitted or crocheted (by 33.2%), other prepared dishes and meals (by 32.5%), vehicle compression-ignition engines (by 31.8%), electric motors and generators, excluding traction motors (by 31.2%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 27.4%), panty hose and tights (by 23.7%), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 23.7%), crude rape and colza oil and their fractions, for human consumption (by 22.6%), prepared meals and dishes based on meat (by 20.8%), medicaments, containing penicillins or other antibiotics (by 20.0%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 20.0%), cash registers (by 19.6%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 19.2%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by 18.3%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 17.0%), plastic floor, wall, ceiling coverings (by 17.0%), medicaments, containing alkaloids or derivatives thereof, but not hormones or antibiotics (by 16.3%), woven fabrics of synthetic staple fibre (by 16.2%), passenger cars (by 13.6%), polyurethane adhesives (by 12.8%).

Production of woven fabrics of cotton weighing less than 200 g/m<sup>2</sup> (excluding gauze, denim and yarns of different colours) and public transport vehicles was at the same level as in the corresponding period of the previous year.



## Methodological notes

The data were compiled on the basis of a monthly survey of production of industrial products on the P-02 form "Report on production and inventory of industrial products". In case of electricity, the data are derived from specialist surveys conducted by Minister responsible for energy and the President of Energy Regulatory Office.

Data are collected according to groupings indicated in the PRODPOL nomenclature for monthly surveys in the reporting year. The nomenclature is based on the Polish Classification of Goods and Services (PKWiU 2015) – introduced on January 1, 2016 for use in statistics, registration, documentation and accounting, and also in official registers and public administration information systems (Regulation of the Council of Ministers of 4 September 2015, Journal of Laws, item 1676) and on the PRODCOM List used in the European Union.

### 1. Scope of units and products surveyed

The monthly survey covers legal entities, organizational units without legal personality (excluding budgetary units and establishments) and natural persons conducting business activities, with the number of persons employed exceeding 49. Units producing electricity are included in the survey regardless of the number of persons employed. The survey applies to all business entities which manufacture products specified in the PRODPOL nomenclature for a given reporting year, regardless of the kind of economic activity classified according to the Polish Classification of Activities (PKD 2007).

The survey of production of industrial products does not include the following units:

- trade units, which ordered the manufacture of goods in a production company and did not provide raw materials for the manufacture of these goods,
- running only publishing activities and not directly involved in the printing preparation process or printing process,
- engaged only in activities related to the production of films, video recordings, television programs, sound and music recordings and not directly involved in the process of reproduction of sound recordings, video recordings or reproduction of computer storage media.

The survey provides data on the quantity of production of finished products manufactured on own account or under subcontracting, from material provided by the principal, as of the end of the reporting month. The processing or modification of a purchased product, which did not change the characteristics of its use and purpose, is not considered as production.

The basic principle in determining the quantity of production is its homogeneity which allows aggregation of particular product ranges.

In order to obtain comparable data on the production of industrial products, the PRODPOL nomenclature is used. It contains a list of products with the symbol and the name of the product or assortment group and assigned to them units of measure in which production should be reported. This allows the units to report the data on production of products which belong to the same category but are traded under different own names, in one PRODPOL grouping under the same name and in the same unit of measure.

The PRODPOL nomenclature is compliant at six-digit level with the PKWiU 2015 classification and at eight-digit level with the PRODCOM List. 10- and 12-digit groupings result from the demands reported by domestic users. The PRODPOL nomenclature is updated annually and is available on the Statistics Poland website

[https://stat.gov.pl/Klasyfikacje/doc/prodpol/opis\\_mc2023.html](https://stat.gov.pl/Klasyfikacje/doc/prodpol/opis_mc2023.html).

It is very important to determine the unit of measurement for each grouping that corresponds to physical characteristics and intended use of particular type of product.

In most cases, the data is collected in the physical units of measure. For non-homogeneous product groupings, if they have at least one common feature defining their properties, conventional units of measure are used. A typical example of the use of conventional units of measure are chemical products in which the quantity is expressed in terms of pure ingredient. For groupings containing products of considerable diversity, e.g. pharmaceutical products, it is not possible to use physical units of measure. In this case, data are collected only on the value of sold production in current prices expressed in thousands zloty.

In cases where one unit of measure does not specify sufficiently the functional features of a given product as well as the volume of its production, several units of measure are used at the same time.

Differences between manufactured production and sold production in the monthly surveys result from the fact that:

- products can be produced for stock and sold in the following reporting periods, e.g. due to the seasonal availability of raw materials for production (e.g. frozen vegetables), increased seasonal sales of certain products (e.g. mineral waters, beer in the summer), in connection with planned holidays or downtime for maintenance,
- products can be sold from stock,
- the products were manufactured under subcontracting, and the contractor or principal is not covered by the P-02 surveys (this especially applies to products from the Wearing apparel division),
- some products may be manufactured by enterprises for their own purposes and used in the further production of other products, therefore they do not appear in the course of trade or appear only in small quantities (this applies especially to basic chemicals).

Monthly data on production of industrial products may be subject to monthly revisions up to 14 months after the end of the reporting year. The revisions result from the specificity of the survey of production of industrial products related to difficulties in classifying certain products to relevant headings of PRODPOL nomenclature and to short period for preparing monthly data by reporting units.

## 2. Explanation of basic concepts

**Manufactured production** is the result of manufacturing processes mutually interrelated and conditioned, occurring at a given time.

Manufactured production includes the total quantity of finished products produced in the reporting period, both from manufacturer's own raw material and from raw material provided by another enterprise or natural person. It also includes the total volume of semi-finished products, parts, sets of machinery and equipment, regardless of whether they were intended for sale or to the parent company, to other plants of the same company, or intended for further processing (assembly) in the enterprise. Therefore, manufactured products include products manufactured by the enterprise, meeting certain standards, technical conditions or contractual terms concluded between the contractor and the recipient. Products made of secondary raw material are considered as production, if they are of utility and are a direct result of the manufacturing work of the enterprise. The production also includes the so-called by-products, created in the production process simultaneously with the main product.

**Sold production of industrial products** is the quantity and value of products of own production or production ordered in another enterprise from provided materials, sold outside of the enterprise in the reporting period, regardless of the moment of their production.

**Production under subcontracted operations** is the production made on order by the contractor, from materials provided by the ordering company (principal).

**Finished products** are products that are not further processed within the same enterprise in which they were produced, that means products completely finished and completed, after passing the entire production process. Finished products should comply with certain standards, and in case of lack of such requirements — with specifications or contractual conditions concluded between the manufacturer and the recipient.