





# **Group of Companies Titan**

The Group of Companies Titan is the largest Siberian company, one of the key investors of Omsk region. It was founded in 1989 by Mikhail Sutyaginsky.

It includes about 20 enterprises.

#### **ENTERPRISES OF PETROCHEMICAL COMPLEX**

- **AO** "Omsky kauchuk" ((production of synthetic rubbers, organic synthesis products, high-octane fuel components and other products of hydrocarbon raw material refining);
- Titan-SM, Limited company (production of plastic lubricants and oils).

#### **ENTERPRISES OF AGRO-INDUSTRIAL COMPLEX**

"Titan-Agro" Ltd (implementation of agro-industrial complex investment projects), including three structural subdivisions: Pig-breeding Complex "Petrovsky", Feed Mill "Pushkinsky", Meat Processing Plant "Pushkinsky".

#### **ENTERPRISES AND DIVISIONS OF INFRASTRUCTURE**

- Thermal power station;
- Investkhimprom Co., Ltd (truck haulage);
- "Titan-Inter-Trade", Ltd (export sales of petrochemical products);
- 2 "Bash-Titan", LLC (official representation of the GC Titan in the Republic of Bashkortostan).

The range of products and rendered services includes **about 200 items**. The products of the Group of Companies Titan are in demand by consumers and occupy substantial shares in the total Russian consumption:

- 2 more than one-third of the Russian SKMS rubber market;
- 2 about a quarter of the Russian MTBE market;
- 215% of the Russian polypropylene market.





The products comply with international quality standards.

The main production site of the company is located on the territory of Omsk region; affiliated and dependent organizations are represented in Russia (Moscow, Saint-Petersburg, Republic of Bashkortostan, Rostov and Pskov regions etc.) and the CIS countries. The total number of employees in the Group is about **4500 people**.

The integrated management system has been introduced at the enterprises of the GC Titan as well as at "Poliom", Ltd meeting the requirements of the international standards ISO 9001, ISO 14001, OHSAS 18001. Consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS).

Throughout the course of its history Titan has been supporting children's and mass sport, veteran organizations, educational and cultural institutions and providing significant assistance to the region in the implementation of social programs.

Improving the material, technical and raw material base, focusing on advanced technologies the GC Titan provides a high potential to satisfy the needs of partners. "We create conditions for growth" - this is the company's slogan.

# INVESTMENT PROJECTS OF THE GC TITAN

On the territory of Omsk region at the initiative of the GC Titan and supported by the Government of Omsk region the projects are being implemented aimed at new high-technology industries development, including via public and private partnership. Since 2010 more than 30 billion rubles have been invested in the economy of the region.

The Group of Companies "Titan" established more than 30 enterprises, implemented over 10 large investment projects, including greenfield projects in petrochemical, power engineering and agricultural industries.

#### **IN-PROGRESS PROJECTS:**

- technical re-equipment of phenol-acetone production with transfer to zeolitic alkylation of isopropylbenzene (IPB) and isopropyl alcohol (IPA) production;
- 2 construction of a complex for the production of PET pellets and BOPET films;
- low-tonnage chemistry production;
- ② increasing of MTBE production capacity up to 330 thousand tons per year;
- technical re-equipment of the ethylene production unit (EP-25);
- Pepoxy resins production;
- Construction of a combined cycle gas turbine unit (CCGT-120);
- 2 extension of feedstock and commodity tank farms;
- transport and logistics network upgrading

## **Contacts**

#### **AO GC TITAN**

644035, the city of Omsk, 22, Gubkin Ave., tel.: +7 (3812) 29-95-55, 35-69-31 e-mail: info@titen-omsk.ru

#### MARKETING DEPARTMENT

tel.: +7 (3812) 29-95-55 (доб. 55-50) e-mail: marketing@titan-omsk.ru

"TITAN-AGRO" LTD
COMPOUND FEED SALES
tel.: +7 (3812) 21-79-40
e-mail: 1888 2888 2888 2888 2888 2888

#### **PORK SALES**

tel.: +7 (3812) 21-79-46 e-mail: trade@agro.titan-a

#### MATERIAL SUPPLY DIVISION

tel.: +7 (3812) 21-79-49 e-mail: snab@agro.titan-agro.ru

<u>www.titanagro.ru</u>





# "Titan-Agro" Ltd (A)

#### **COMPANY PROFILE**

The company was founded in 2006 to carry out investment activities within the state program of the agriculture development. The company is a part of Agricultural and Biotechnological Industrial Cluster (Omsk biocluster), included in the register of industrial clusters of the Ministry of Industry and Trade of the Russian Federation. The company includes three separate subdivisions.

#### Pig-breeding complex "Petrovsky"

#### Capacity:

- rated: 50 thousand pigs of simultaneous housing

- achieved: 60 thousand pigs of simultaneous housing

**Breeding stock:** Hermitage Genetics **Equipment:** Big Dutchman (Germany)

#### Feed mill "Pushkinsky"

Capacity: up to 125 thousand tons per year

**Equipment:** Bühler (Switzerland)

## Meat processing plant "Pushkinsky", Phase I (industrial slaughterhouse)

Capacity: 11.5 thousand tons per year

Equipment: Banss (Germany), Shaller (Austria), Stork (Holland)

Address: 644035, Omsk region, Omsk district, Pushkino village, 40/1 Krasnovarsky trakt,

Tel.: +7 (3812) 21-79-49 e-mail: info@agro.titan-agro.ru

www.titan-agro.ru











# IMPACTFUL COMPOUND FEED

Compound feed for cattle, pigs, other farm animals and poultry is a homogeneous mixture of different feedstuffs, purified and crushed to the required size, formulated according to a recipe taking into account scientifically based input rates and fully satisfying the need for nutrient, mineral and biologically active substances.

## THE RANGE OF MIXED ANIMAL FEED PRODUCED BY THE FEED MILL "PUSHKINSKY" INCLUDES DOZENS OF PRODUCTS:

- compound feed for laying hens, broilers and growing egg breeds;
- compound feed for wild game (pheasants, quails);
- complete feed for turkeys;
- complete feed for geese, ducks;
- complete feed and feed concentrates for pigs;
- feed concentrates for cattle;
- feed concentrates for horses;
- feed concentrates for nutrias and rabbits.

The Feed Mill "Pushkinsky" uses **high-tech equipment** from Bühler (Switzerland) to produce compound feed, providing accurate dosing, high-quality mixing, high feed homogeneity and rapid transition from one recipe to another. The formulation is developed taking into account animal physiology, housing conditions and a number of other factors.

The plant's automated technological process control system makes it possible to give production assignments for feed output according to recipes, monitors the progress of operations, displays it in the visualization system, as well as collects statistics on production parameters and signalling messages.

At client's request, feed can be produced in bulk, in the form of crumbles or pellets with optimal particle sizes for each species, age and sex group of farm animals and poultry, which reduces feed conversion.

The capabilities of technological lines provide various formulations production, including starter and prestarter feed.

Compound feed is supplied in 10, 35, and 40 kg bags.

The finished product is shipped to customers at a special site, which eliminates product loss. Compound feed can be shipped in special feed trailers as well as in tipper trucks with a covering material on the body.

The feed mill "Pushkinsky" has introduced and implements a **techno-chemical control system**, which includes:

- input control of all incoming feedstock;
- control over placement, storage and release of feedstock to production;
- production process control;
- quality control of finished products.

All manufacturing parameters are monitored during the production process to ensure that products are in line with recipes, beginning with feeding control into production and ending with placing the feed in the finished product warehouse. The final products are also tested by the production technology laboratory to ensure that they meet the requirements of regulatory documentation for all the necessary parameters.

#### Production and technological laboratory structure:

- sampling and testing laboratory;
- chemical department;
- · toxicological and bacteriological departments;
- production laboratory

More than 100 units of modern analytical and measuring equipment manufactured by well-known companies, such as Agilent, Analitik Yena, FOSS, Gerhard and others are installed in the laboratory. **The advanced laboratory equipment** makes it possible to produce feed of exceptionally high quality, which is confirmed by both regulatory authorities and consumers.







In 2018, compound cattle feed produced by the Feed Mill "Pushkinsky" was awarded with a diploma at the federal stage of "100 Best Goods of Russia" competition in the "Food Products" category, and in 2016, compound poultry feed attained the laureate status.











#### **COMPOUND BROILER FEED**

GOST R 51851-2001. Compound poultry feed

GOST 18221-99. Complete poultry feed

#### Name

PK 5-1 - broilers from 1 to 3 weeks

PK 5-2 - broilers from 4 to 5 weeks

PK 6 - broilers from 6-7 weeks and older

Indicators	PK 5-1	PK 5-2	PK 6	
Metabolizable energy (ME), kcal/100 g.	310	315	320	
Crude protein, %	23	21	20	
Crude fiber, %	3.5	3.65	3.7	
Lysine, %	1.36	1.25	1.17	
Methionine + cystine, %	0.98	0.9	0.85	
Calcium, %	1	0,9	0.9	
Phosphorus, %	0.7	0.7	0.7	
NaCl, %	0.2	0.2	0.2	

#### FEED FOR LAYING HENS AND YOUNG HENS OF LAYING BREED

GOST R 51851-2001. Compound poultry feed

GOST 18221-99. Complete poultry feed

#### Name

PK 2 - chickens from 1 to 7 weeks

PK 3 - young hens 8-14 weeks and from 15 weeks up

to 2% egg-laying capacity
PK 4 - young hens from 14 to 17 weeks

PK 1-1 - laying hens up to 45 weeks PK 1-2 - laying hens 45 weeks and older

PK 1-3 - brood hens

PK 4 - young nens from 14 to 17 weeks						
Indicators	PK 2	PK 3	PK4	PK 1-1	PK 1-2	PK 1-3
Metabolizable energy (ME), kcal/100 g.	290	270	260	270	260	270
Crude protein, %	19.5	15.5	13.5	16.5	15.5	16.5
Crude fiber, %	3.5	4.5	4.5	4	4.5	4
Lysine, %	1	8.0	0.7	0.75	0.7	0.75
Methionine + cystine, %	0.75	0.6	0.53	0.6	0.57	0.6
Calcium, %	1	1	1.1	3.6	3.8	3.8
Phosphorus, %	0.79	0.6	0.6	0.7	0.6	0.6
NaCl, %	0.2	0.2	0.2	0.2	0.2	0.2

#### **COMPOUND QUAIL FEED**

GOST 28460-2014. COMPOUND FEED FOR WILD GAME

#### Name

DK-50 - pheasants, quails from 1 to 4 weeks of age

DK-51 - pheasants, quails from 5 to 6 weeks of age

DK-52 - quails from 7 weeks and older

Indicators	PK-50	PK-51	PK-52
Metabolizable energy (ME), kcal/100 g.	300	275	290
Crude protein, %	28	17	21
Crude fiber, %	3	5	5
Lysine, %	1,41	0,86	1,05
Methionine + cystine, %	1,02	0,62	0,74
Calcium, %	1	1,2	2,8
Phosphorus, %	0,8	0,8	0,8
Na, %	0,5	0,5	0,5

#### **COMPLETE TURKEY FEED**

GOST R 51851-2001. Compound poultry feed GOST 18221-99. Complete poultry feed

#### Name

PK-11 - young turkeys from 1 to 8 weeks of age

PK-12 - young turkeys from 9 to 17 weeks of age

PK-13 - young turkeys from 18 to 30 weeks of age

PK-10 - adult turkeys

Indicators	PK-11	PK-12	PK-13	PK-10
Metabolizable energy (ME), kcal/100 g.	285	290	270	280
Crude protein, %	26,5	21	13,5	15
Crude fiber, %	5	5	7	6
Lysine, %	1,48	1,2	0,7	0,7
Methionine + cystine, %	0,94	0,78	0,5	0,55
Calcium, %	1,6	1,7	1,7	2,5
Phosphorus, %	1	0,9	0,7	0,6
Na, %	0,3	0,25	0,22	0,22

Титан







#### **COMPLETE DUCK FEED**

GOST R 51851-2001. Compound poultry feed GOST 18221-99. Complete poultry feed

#### Name

PK-21 - young ducks from 1 to 3 weeks

PK-22 - young ducks from 4 to 8 weeks
PK-23 - rearing young ducks from 9 to 26 weeks
PK-20 - adult laying ducks

Indicators	PK-21	PK-22	PK-23	PK-20
Metabolizable energy (ME), kcal/100 g.	280	295	260	265
Crude protein, %	17,5	15,5	13,5	15,5
Crude fiber, %, maximum	6	6	10	7
Lysine, %	1	0,8	0,7	0,7
Methionine + cystine, %	0,77	0,68	0,59	0,57
Calcium, %	1,1	1,1	1,1	2,5
Phosphorus, %	0,7	0,65	0,6	0,6
Na, %	0,22	0,22	0,22	0,22

#### **COMPLETE FEED FOR GEESE**

GOST R 51851-2001. Compound poultry feed GOST 18221-99 Complete poultry feed

#### Name

PK-31 - young geese from 1 to 3 weeks

PK-32 - young geese from 4 to 8 weeks

PK-33 - rearing young geese from 9 to 26 weeks

PK-30 - adult geese

Indicators	PK-31	PK-32	PK-33	PK-30
Metabolizable energy (ME), kcal/100 g.	280	275	260	260
Crude protein, %	19,5	17,5	14	14
Crude fiber, %, maximum	5,5	6	10	10
Lysine, %	1	0,9	0,65	0,65
Methionine + cystine, %	0,78	0,7	0,55	0,55
Calcium, %	1,1	1,1	1,2	1,2
Phosphorus, %	0,7	0,7	0,6	0,6
Na, %	0,22	0,22	0,22	0,22

#### **COMPLETE FEED FOR PIGS**

GOST R 52255-2004. Feed for pigs

Name								
SPK-1 - empty and pregnant sows SPK-2 - milking sows and breeding boars SPK-3 - young pigs from 10 to 42 days SPK-4 - young pigs from 43 to 60 days			SPK-5 - young pigs from 61 to 120 days SPK-6 - replacement young pigs from 4 to 8 months SPK-7 - fattening, 1st period SPK-8 - fattening, 2nd period					
Indicators	SPK-1	SPK-2	SPK-3	SPK-4	SPK-5	SPK-6	SPK-7	SPK-8
Metabolizable energy (ME), mJ/kg	11,3	11,3	14,3	12,1	12,1	10,5	11,6	12,2
Crude protein, %	15	15,9	19,9	17,2	15,1	15	14,5	13
Crudo fibor %	6.4	5.5	2.0	5.4	15	5	5.6	5.5

Metabolizable energy (ME), mJ/kg	11,3	11,3	14,3	12,1	12,1	10,5	11,6	12,2
Crude protein, %	15	15,9	19,9	17,2	15,1	15	14,5	13
Crude fiber, %	6,4	5,5	2,9	5,4	4,5	5	5,6	5,5
Lysine, %	0,65	0,73	1,1	0,84	0,73	0,69	0,66	0,55
Methionine + cystine, %	0,42	0,44	0,7	0,54	0,47	0,46	0,45	0,4
Calcium, %	0,8	0,6	1	0,9	0,9	0,7	0,7	0,6
Phosphorus, %	0,8	0,6	0,9	0,9	0,8	0,5	07	0,6
NaCl, %	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4

#### **FEED CONCENTRATES FOR PIGS**

GOST R 52255-2004. Feed for pigs

Name	
SKK-50 - prenursery pigs up to 2 months SKK-51 - nursery pigs from 2 to 4 months SKK-52 - replacement young pigs from 4 to 8 months SKK-53 - empty sows and sows in the first 2/3 of pregnancy SKK-54 - sows in the last 1/3 of pregnancy and milking sows	SKK-55 - meat fattening of pigs SKK-56 - bacon fattening of pigs SKK-57 - breeding boar SKK-58 - fattening of pigs up to fat condition

Indicators	SKK-50	SKK-51	SKK-52	SKK-53	SKK-54	SKK-55	SKK-56	SKK-57	SKK-58
Metabolizable energy (ME) mJ/kg	, 12,7	12,4	11,1	10	12,2	11,1	11,6	12,2	10
Crude protein, %	20	17,5	16	14,5	18	15,5	16	17	14
Crude fiber, %	3	4,5	5,5	6,4	5,5	6,5	5,5	5,5	7
Lysine, %	1	0,8	0,67	0,6	0,77	0,65	0,69	0,81	0,6
Methionine + cystine, %	0,65	0,52	0,41	0,36	0,46	0,4	0,42	0,54	0,36
Calcium, %	0,8	0,8	0,6	0,8	0,8	0,8	0,8	0,7	0,8
Phosphorus, %	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,5	0,6
NaCl, %	0,4	0,4	0,6	0,6	0,4	0,6	0,6	0,5	0,6







COMPOUND FEED FOR NUTRIAS

RABBITS AND HORSES

#### FEED CONCENTRATES FOR CATTLE

GOST R 52254-2004. Cattle feed

#### Within non-grazing period

KK-60 - milking cows and heifers KK-

KK-61 - highly productive cows KK-62 - calves up to 4 moths

KK-63 - young cattle from 4 to 12 months

KK-64 - young cattle from 12 to 18 months

KK-65 - cattle fattening KK-66 - breeding bulls

Indicators	KK-60	KK-61	KK-62	KK-63	KK-64	KK-65	KK-66
Metabolizable energy (ME), mJ/kg	9.5	11	11	9.3	9.4	9.6	10
Feed units, in 100 kg	95	95	94	95	90	90	100
Crude protein, %	16	20	20	17	16	15	18
Crude fiber, %	7	6	5	7.5	9	12	5
Calcium, %	0.5	0.6	0.7	0.6	0.6	0.5	0.65
Phosphorus, %	0.7	0.85	0.75	0.8	0.8	0.7	0.85
NaCl, %	1	1	0.4	1	1	1	1

### FEED CONCENTRATES FOR NUTRIAS AND RABBITS

GOST 32897-2014. Compound feed for furbearing animals, rabbits and nutrias

#### Name

PZK-90 - for all-age nutrias and young rabbits

Indicators	PZK-90
Digestible energy (DE), mJ/kg	9.5
Feed units, in 100 kg	109
Crude protein, %	16.32
Crude fiber, %	4.9
Lysine, %	0.68
Methionine + cystine, %	0.45
Calcium, %	1.37
Phosphorus, %	1.11
NaCl, %	0.68

#### FEED CONCENTRATES FOR CATTLE

GOST R 52254-2004. Cattle feed

#### Within grazing season

KK-60-1 - milking cows and heifers

KK-61-1 - highly productive cows KK-62 - calves up to 4 moths

KK-63-1 - young cattle from 4 to 12 months

KK-64-1 - young cattle from 12 to 18 months KK-65-1 - cattle fattening

KK-65-1 - cattle fattening KK-66-1 - breeding bulls

Indicators	KK-60-1	KK-61-1	KK-62	KK-63-1	KK-64-1	KK-65-1	KK-66-1
Metabolizable energy (ME), mJ/kg	9.7	10	11	9.3	9.5	9.5	10
Feed units, in 100 kg	95	95	94	90	90	90	100
Crude protein, %	12.5	13	20	13	12	11	15
Crude fiber, %	5	6	5	7.5	9	11	5
Calcium, %	0.6	0.65	0.7	0.6	0.6	0.5	0.65
Phosphorus, %	0.8	0.85	0.75	0.7	0.6	0.7	0.85
NaCl, %	1	1	0.4	1	1	1	1

#### **FEED CONCENTRATES FOR HORSES**

GOST R 54492-2011. Horse feed

#### Name

LK-71-1 - for trained and sport horses

LK-75 - for breeding mares LK-75-1 - for milk mares

Indicators	LK-71-1	LK-75	LK-75-1
Digestible energy (DE), mJ/kg	13.5	13.5	13.5
Feed units, in 100 kg	98	96	102
Crude protein, %	14	14.08	12.5
Crude fiber, %	8.08	11.18	8.03
Lysine, %	0.58	0.52	0.52
Methionine + cystine, %	0.44	0.47	0.37
Calcium, %	1	0.86	0.48
Phosphorus, %	0.6	0.7	0.46
NaCl, %	0.11	0.14	0.16

#### PIG BREEDING PRODUCTS





#### **MEAT (PORK)**

GOST 31476-2012. Slaughter pigs. Pork carcasses and semi-carcasses

#### Product specifications

There are following pig breeds at the pig-breeding complex "Petrovsky": Large White, Landrace, Duroc and Hylean Maxgro. These breeds are characterized by bacon productivity trend, which determines meat yield quality. The average slaughter yield is over 72% of live weight. The average weight of a slaughter pig is 105kg.

Pork meat is characterized by a high water-binding power (pH level 5.7-5.9, NOR category), the fat depth across the carcass surface is minimal. The entire product range complies with the requirements of current regulatory technical documentation. The Pig-breeding Complex "Petrovsky" meets the criteria set out in Compartment IV (the highest degree of biological protection).

The pig breeding complex supplies slaughter animals to the Meat Processing Plant "Pushkinsky", a separate subdivision of "Titan Agro" Ltd. Pork is deboned, packed and shipped at this agro-industrial enterprise. A full production cycle and sales of pork on the company's own feed base ensure consistently high product quality.

#### Storage

Chilled pork is stored in a suspended condition in chambers with a moderate air movement (0.2-0.3 m/s) with a relative humidity of 85-90% and temperature from 0 to -2°C. Meat cooling time - 24 hours. Chilled meat term of storage is maximum 12 days.

Frozen meat is stored in stacks at a temperature of -18°C and relative air humidity of 95% during 6 months.

#### PROCESSED PORK BY-PRODUCTS

GOST 32244-2013

#### Storage

At a temperature from 0 to -1°C and relative air humidity 85-90% - maximum during 2 days; at a temperature of -18°C - maximum 30 days.

#### Packin

Packing Is made depending on the product type and customer preferences:

- individual packing in stretch film;
- vacuum packing
- · multiple packing in polyethylene bags.

The products are sold in corrugated packaging.

## NATURAL PORK LARGE-SIZED SEMI-FINISHED PRODUCTS

#### Storage

Storage conditions and periods - at 0-6 °C for 72 hours maximum; vacuum-packed - up to 18 days; at -18 °C for 6 months maximum.

#### Packing

Packing Is made depending on the product type and customer preferences:

- individual packing in stretch film;
- vacuum packing
- · multiple packing in polyethylene bags.

The products are sold in corrugated packaging.



# Titan-Agro @

#### **COMPOUND FEED SALES**

tel.: +7 (3812) 21-79-40 e-mail: <u>sale@agro.titan-agro.ru</u>

#### PORK SALES

tel.: +7 (3812) 21-79-46 e-mail: trade@agro.titan-agro.ru

#### **MATERIAL SUPPLY DIVISION**

tel.: +7 (3812) 21-79-49 e-mail: snab@agro.titan-agro.ru

www.titan-agro.ru



