

# LIFE SCIENCE CLUSTER OF LATVIA

pharma, chemicals, eco products, cosmetics, service

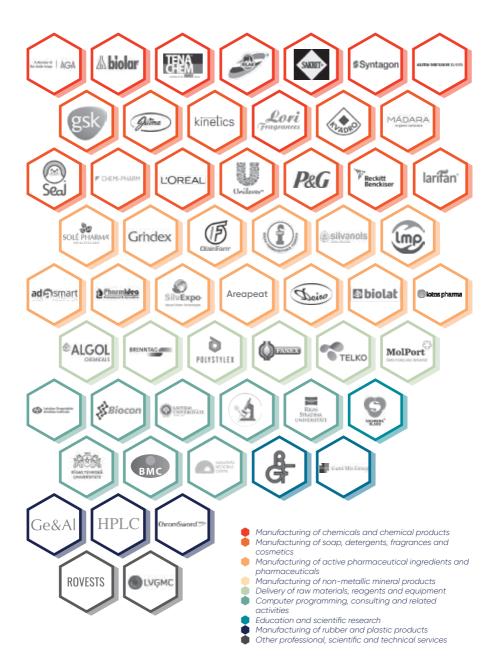








# The members of Latvian Chemical and Pharmaceutical Industry (LAKIFA)



#### Life Science Cluster of Latvia Lifescience.lv

#### Latvia – Innovation Laboratory

Pharmaceutical industry is one of the drivinaforcesinsuccessfulinnovations and business effectiveness in Latvia. As regards to future perspectives of chemical and pharmaceutical industry in Latvia, "laboratory" or hub is a term clearly emerging in the broadest sense of this word. It is possible for Latvia to become the best place in the world for the testing of ideas in natural sciences area. Advantages of the state for implementing this development niche - well-developed and research infrastructure. strong scientific potential and experienced specialists.



Modern industrial base is essential for the future development of the industry, as it forms solid ground for manufacturing new niche products with great export potential. Latvian pharmaceutical and chemical industry companies are becomina increasinally aware of the necessity to cooperate and create niches with higher added value. One of the solutions jointly used open type technology transfer infrastructure (PharmaHub) bringing together pharmaceutical companies, researchers, academic personnel and representatives of related industries and allowing them to work on the development of new pharmaceutical forms and their manufacturing process.



Raina Dūrēja - Dombrovska LAKIFA CEO

#### Export across the Globe

Latvia is part of the global market, and state pharmaceutical and chemical industry companies are operating on a alobal scale, becoming world leaders in some product groups. 83% of the manufactured chemicals and pharmaceutical products are sold outside the borders of Latvia. Many Latvian companies can be proud of product sales across the globe, some even have opened manufacturing plants abroad. Promoting the growth of Latvian companies and increasing state competitiveness, market players in the chemical and pharmaceutical industry are reaching further and more exotic export markets, including South Korea, USA, Singapore, Malaysia and South East Asia countries. Export amounts continue to increase every year.

#### **SILVASEPT**



# description

Hard candy with Latvian extract is loaded with vitamins and other valuable substances. Food supplement especially recommended for strengthening the body resistance during the cold season.

# function

Strengthens immunity and protects from viruses

# ingredients

Spruce extract Silbiols

#### **BIOLAT**

Biolat, JSC was established in 1993, and since then its aim has been applying of long-term research results about forest biomass to gain profit by producing high-quality and environment-friendly bio-active products of ecologically clean forest resources, mainly the green mass (spruce and pine needles).

#### **ALERGOSIL**



# description

Alergosil is food supplement with innovative formulation for ensuring normal immune system response. Especially recommended when there is increased pollen concentration in air. Innovative and clinically tested product which does not cause drowsiness and other side effects, unlike other comparable products.

# function

Total care and relief of allergic rhinitis

# ingredients

Curcumin, Quercetin, Vitamin D3

#### **BIOLAT**

BIOLAT, JSC 111 Rigas Street, Salaspils LV-2169, Latvia Phone: (+371) 67686290



#### **URSOGRIX®**



## description

URSOGRIX ® contains the active pharmaceutical inaredient ursodeoxycholic acid - a natural bile acid found in small quantities in normal human bile. It dissolves cholesterol gallstones, and increases hepatocyte membrane stabilizina and functions resistance durina harmful exposure, restores damaged hepatocyte membranes, inhibits the abnormal immune response in the liver at cholestatic liver disease

#### function

Treatment of hepatic and gallstone diseases

## ingredients

Ursodeoxycholic acid, maize starch, silicon dioxide (E 551), magnesium stearate (E 470B), water purified;

hard gelatin capsule (body and cap composition): titanium dioxide (E 171), gelatin (E 441).

These product descriptions are informative and not for commercial purposes.

#### **GRINDEKS**

Grindeks, JSC is an international pharmaceutical company focused on research, development, manufacturing and sales of original products, generics and active pharmaceutical ingredients. The Group of Grindeks has four subsidiary companies in Latvia, Estonia and Slovakia as well as representative offices in 12 countries. Grindeks, JSC specializes in the heart and cardiovascular, CNS, anti-cancer and gastroenterological medication therapeutic groups.

#### **OXYTOCIN-GRINDEKS**



#### description

The product contains oxytocin – a hormone used as a medication to facilitate childbirth, reduce postpartum bleeding and to stimulate lactation. The medicine contracts the smooth muscles in the womb and myoepithelial cells in mammary gland, which ensures secretion of milk from the mammary glands.

#### function

Labour induction, reducing postpartum bleeding, stimulation of lactation.

# ingredients

Oxytocinum, chlorobutanol hemihydrate, acetic acid (pH-adjustment), water for injections.

These product descriptions are informative and not for commercial purposes.

#### **GRINDEKS**

GRINDEKS, JSC 53 Krustpils Street, Riga LV-1057, Latvia Phone: (+371) 67083500 **Grindex** 

# PERMETHRIN LMP 40 mg/g GEL



# description

The active substance of the gel – permethrin – is an insecticide and acaricide for external use, it has insecticidal effect on many insects, including scabies mite.

# function

Pharmacotherapeutic group: agent for the treatment of scabies.

## ingredients

1 g of gel contains 40 mg of permethrin.

#### LMP

LMP, Ltd. is a pharmaceutical manufacturing company, which develops, manufactures and sells finished dosage forms for topical use – solutions, gels, creams and ointments. These are quality products effective for treatment of different kind of skin lesions, mucous membrane and upper respiratory tract diseases, as well as muscles pain and pain caused by trauma.

# ANTI-ITCHING 10 mg/g GEL



## description

Gel for treatment of skin and mucosal itching of various etiology (allergic skin reactions, sun-burns and first-grade thermal burns, insect stings, urticaria, pruritic eczema, varicella).

Gel reduces itching, oedema and hyperemia. It also has marked antiallergic and local anesthetic effect

# function

Pharmacotherapeutic group: antihistamine for local use.

# ingredients

1 g of gel contains 10 mg of diphenhydramine hydrochloride.

#### LMP

LMP, Ltd. 1 Vietalvas Street, Riga LV-1009, Latvia Phone: (+371) 67040788



# **AteroLip®**



# description

AteroLip® active ingredients are flavonoids, red yeast rice monacolins and berberine. Monacolin K, which helps to maintain normal blood cholesterol level. Flavonoids play role in reducing inflammation in the arteries as well as they have antithrombogenic and antiatherosclerotic properties. Berberine has an effective lipid lowering mechanism, it improves arterial endothelial function.

#### function

AteroLip ® helps to maintain normal blood cholesterol level.

# ingredients

Monacolin K, berberine and flavonoids

#### LOTOS PHARMA

LOTOS PHARMA, Ltd. is a pharmaceutical company that develops innovative pharmaceutical brand products exclusively from natural, raw materials of the highest quality, using unique production technologies based on the latest researches in the world. LOTOS PHARMA, Ltd. success is shaped by human, natural and technology symbiosis.

# **Good Sleep Spray**



# description

Good Sleep Spray contains passiflora extract and melatonin. Passiflora has a natural sedative properties, it helps to induce relaxation and healthy sleep. Melatonin helps to control circadian cycles and contributes to the reduction of time taken to fall asleep. Sublingual administration provides absorption - 4 times greater than using melatonin tablets. No sweeteners and artificial colorants.

#### function

Helps to induce relaxation and healthy sleep.

# ingredients

Melatonin, passiflora extract

#### LOTOS PHARMA

LOTOS PHARMA, Ltd. Baznicas Street 45-24, Riga LV-1010, Latvia Phone: (+371) 26002554



# [18F] - FDG or Fludeoxyglucose



# description

[18F] - FDG is an injectable radiopharmaceutical a glucose analog, with the positron - emitting radionuclide fluorine - 18. The preferential accumulation of FDG in glucose avid cells, allows perform various type positron emission tomography (PET) diagnostics.

# function

[18F] - FDG is the most frequently used PET radiotracer in oncology and widely used in neurology, cardiology etc.

#### NUCLEAR MEDICINE CENTRE

Nuclear Medicine Centre, Ltd. (NMC) was developed with the purpose to introduce innovative technologies in Latvia and manufacture products with high added value, providing solution for the very significant challenge of medicine – early diagnostics of oncologic diseases. NMC scientifically science and technology park is involved in several nuclear medicine research projects, allowing to to perform clinical trials using PET/CT.

# [<sup>68</sup>Ga] - PSMA - 11 or [<sup>68</sup>Ga] - prostate specific membrane antigen - 11



# description

[68Ga] - PSMA - 11 is an injectable radiopharmaceutical used for prostate - specific membrane antigens (PSMA) expressing tumors (prostate cancer) diagnostics with positron emission tomography (PET).

#### function

[68Ga] - PSMA - 11 is PET radiotracer used in prostate cancer primary diagnostics, staging, re-staging, treatmentplanning and evaluation, etc.

#### NUCLEAR MEDICINE CENTRE

NUCLEAR MEDICINE CENTRE, Ltd. 13 Gardenes Street, Riga LV-1002, Latvia Phone: (+371) 67806350

info@rnmc.lv



#### **Furasol®**



# description

Furasol ® will quickly and efficiently relieve sore throats and eliminate inflammatory process. Antibacterial agent, belonging to the nitrofuran group, effective against both gram – positive and gram – negative microflora, it is also effective against strains of such staphylococci and other bacteria that are resistant to antibiotics.

#### function

Inflammation of the oral cavity and throat, infected wounds, burns and suppurative inflammations.

# ingredients

Active substance: Furaginum solubile

These product descriptions are informative and not for commercial purposes.

#### **OLAINFARM**

Olainfarm, JSC is the leading manufacturer in the chemical and pharmaceutical sector of the Baltic States with over 45 years of experience. Company export to more than 60 countries worldwide; export share is near 75%. Portfolio contains over 60 FDFs, 25 APIs and more than 20 Intermediates. The key areas of specialization in FDFs include neurology, cardiology, infectology and allergology. Olainfarm has a long-standing technological and know-how advantage in adamantane, quinuclidine and nitrofurane chemistry.

#### **Fenkarol®**



# description

Fenkarol ® blocks H1 receptors and activates the enzyme diaminoxidase thus reducing concentration of histamine in tissue fast. Active substance:

Quifenadini hydrochloridum

Dose and quantity: 10 mg N20; 25 mg N20; 50 mg N15

Pharmaceutical form: Tablets

Categories: Anti-allergy medicines, Over the Counter (OTC).

Therapeutic indications:

Pollinosis or hay fever (allergic rhinitis and conjunctivitis).

Acute and chronic urticarial.

Dermatosis. Allergy caused by food or medical products.

#### function

Fenkarol is a preparation of the antihistamine group characterised by fast and wide-spectrum effect

# ingredients

Active substance: Quifenadini hydrochloridum

These product descriptions are informative and not for commercial purposes.

#### **OLAINFARM**

OLAINFARM, JSC 5 Rupnicu Street, Olaine LV-2114, Latvia Phone: (+371) 29409499





PHARMIDEA, Ltd. is a Latvian-based pharmaceutical manufacturer. The company's core competence relates to the manufacturing of small batches of sterile products in vials, which come in both lyophilized and liquid form. The services include contract manufacturing, product manufacturing, technological developments, including the validation and elaboration of specifications and testing methods, as well as stability studies and a dossier related to the registration of products.



PHARMIDEA, Ltd. product portfolio includes self-developed generics for intensive care, women's health and anti-cancer drugs that have been registered in more than 40 countries. The company's main export regions include the European Union, the Middle East, Russia, Turkey, Southeast Asia, Mexico and others.

#### PHARMIDEA

PHARMIDEA, Ltd. 4 Rupnicu Street, Olaine LV-2114, Latvia Phone: (+371) 67069889



#### HEPAHOLS DIGESTIVE SYSTEM SUPPORT



## description

Hepahols contains herbal extracts which have a beneficial effect on the digestive system. Extracts of dandelion root, rosemary leaf and artichoke leaf stimulate the secretion of digestive juice, intestinal function, liver function, bile formation and release, alleviate the digestive discomfort (nausea, feeling of fullness, flatulence) caused by gastrointestinal disorders.

#### function

Alleviate the digestive discomfort caused by gastrointestinal disorders.

# ingredients

2,5 ml/ 5 ml/ 7,5 ml contain: Dandelion root dry extract – 0,33 g/ 0,67 g/ 1,00 g Rosemary leaf dry extract – 0,17 g/ 0,35 g/ 0,52 g Artichoke leaf dry extract – 0,16 g/ 0,32 g/ 0,48 g

#### RĪGAS FARMACEITISKĀ FABRIKA

Rīgas Farmaceitiskā Fabrika, JSC is the Baltic biggest manufacturer of galenic preparations, soft pharmaceuticals and herbal drugs & teas. Medicinal products based on vulnerary plants or substances derived from vulnerary plants takes 80 % from factory's output. The product range consists of more than 100 titles including tinctures, drops, extracts, syrups, alcoholic and oil solutions of pharmaceuticals, liniments, ointments, herbal drugs and their composed mixtures.

#### HYPNOSOLS SLEEP SUPPORT



## description

To facilitate falling asleep, provide healthy sleep and to maintain circadian rhythm. Melatonin contributes to the reduction of time taken to fall asleep.

#### function

Provide healthy sleep and reduce nervous tension.

# ingredients

5 drops (0,14 ml) contain: Passion flower extract - 40,5 mg Valerian root dry extract - 7,5 mg Melatonin - 1,4 mg

#### RĪGAS FARMACEITISKĀ FABRIKA

RĪGAS FARMACEITISKĀ FABRIKA, JSC 10 Ozolu Street 10, Riga LV-1005, Latvia Phone: (+371) 29240174





# Cardiopren



# description

Cardiopren caps contain coenzyme Q10, linseed oil and polyprenols- unique natural substance, bioregulator obtained from conifer tree needles. Patented composition has clinically proven effects to improve the functioning of separate organs in the human organism, to reduce statin-induced adverse effects, as well as improve the functionality of myocardium and muscle cells.

## function

For healthy muscles and heart

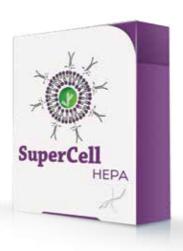
# ingredients

Polyprenols, Coenzyme Q10, Linseed oil

#### SILV EXPO

Silv EXPO, Ltd. has been working on transforming fresh ideas, developments and technologies into new generation of products or services. The company has developed several innovative products for the treatment and prophylaxis of cardiovascular, respiratory, and chronic hepatic diseases. Several in vitro and in vivo studies have been carried out in close cooperation with scientists, researchers and health care professionals, as well as a clinical study to find the most effective dosages and compound combinations of Latvian spruce and pine needle active substances.

# SuperCell HEPA



## description

SuperCell® HEPA caps have been developed using modern smart technology principles. Dietary supplement contains coniferous polyprenols and plant origin phospholipid mixture (which is standardized by phosphatidylcholine). These are substances that participate in metabolic processes in the liver and are able to maintain liver health and regeneration of cells.

#### function

To maintain liver health and regeneration of cells

# ingredients

Polyprenols, Phosphatidylcholine

#### SILV EXPC

SILV EXPO, Ltd. 12-2 Alberta Street, Riga LV-1010, Latvia Phone: (+371) 67686290





# Faringo spray



# description

All ingredients of the product are natural oils that form a mechanical protective layer on the mucosal membrane of the oral cavity and pharynx. This helps to keep the mucous membrane moist and elastic, reduces discomfort and pain, reduced scratching sensation in the throat and friction, thus making swallowing of food pieces easier.

## function

Diminishes irritation of oral cavity and pharyngeal mucosa after various manipulations have been performed or in case of inflammation.

#### ingredients

Vegetable oil, seabuckthorn oil, calendula flower oil extract, bergamot oil.

#### **SILVANOLS**

SILVANOLS, Ltd. is Latvian pharmaceutical company with expert knowledge in developing and producing food supplements, medical devices, cosmetics and OTC medicine using natural ingredients that has operated for nearly 25 years. It offers products for various pharma market segments and provides full, high-quality service from concept to final product. Company employs a scientific and innovative approach to the development of safe and effective products as well as accuracy in manufacturing processes.

# Rinogel spray



# description

Sprayed gel on water-soluble base that covers the nasal mucosa. It helps to keep mucosa moist, promotes the dissolution and removal of the secretion, thus facilitating breathing, as well as protects the mucosa from microorganisms.

#### function

Facilitates breathing through the nose, used for prevention of rhinitis and respiratory infections.

# ingredients

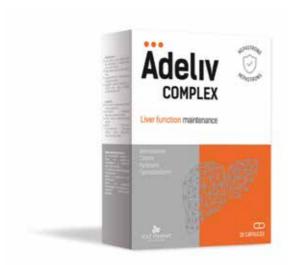
Calendula tincture, coneflower tincture, eucalyptus oil, peppermint oil, sea buckthorn oil, Siberian fir oil

#### **SILVANOLS**

SILVANOLS, Ltd. 2A Kurbada Street, Riga LV-1009, Latvia Phone: (+371) 67142829



# **Hepastrong Adeliv COMPLEX**



# description

Hepastrong ADELIV complex consists of S-Adenosyl-L-Methionine-a powerful body's metabolite. It is used to improve and normalize the liver functions and to maintain the membranes of the liver cells. Choline and cobalamin contributes to normal lipid and homocysteine metabolism. Pyridoxine promotes normal cysteine synthesis and helps to provide normal homocysteine, protein and glycogen metabolism.

#### function

Ensures proper liver function and detoxification

## ingredients

S-Adenosyl-L-Methionine, Choline Bitartrate (choline), pyridoxine, cabalamin

#### SOLEPHARM

Solepharm, Ltd. manufactures pharmaceutical products that are developed in cooperation with doctors, pharmacists and scientific institutions while guaranteeing distinguished quality and individual approach to each customer, reseller and partner. The company has been a global player in the pharmaceutical market for the past 10 years. Solepharm, Ltd. offers more than 75 different original products that contain herbal extracts, amino acids, vitamins and trace elements, which have proved effectiveness in clinical trials and daily practice.

#### Soluro® DUO



## description

Soluro ® DUO consists of two blisters. Orange capsule contains proanthocyanidins (PAC) and forest cranberry cryodessicate concentrate that eliminate bacteria with urination. Transparent capsule contains D-Mannose that prevents the bacteria (E.Coli) from sticking to the walls of the urinary tract. The product is completely safe for pregnant women, women during lactation period and children.

#### function

Ensures double exposure against cystitis

## ingredients

D-Mannose, proanthocyanidins (PAC) 30%, Forest cranberry cryodessicate concentrate

#### **SOLEPHARM**

SOLEPHARM, Ltd. 16 Plienciema Street, Marupe LV-2167, Latvia Phone: (+371) 29484403



# **Cutting and Welding Gases**



Cutting and Welding Gases. Supporting all welding techniques with the full selection of welding, shielding and laser gases and mixtures along with reliable supply solutions and robust welding equipment.

#### $\Delta G \Delta$

AGA, Ltd. is the largest industrial and medical gas company in Latvia. Operating in Nordic and Baltic countries, AGA, Ltd. currently is the leading industrial gas company in Northern Europe and part of the world's leading gas and technology concern The Linde Group. In Valmiera company is manufacturing industrial and medical oxygen and nitrogen for the whole Baltic market. Company supply carbon dioxide to all Baltic countries from company's terminal in Skulte.

#### **Food Grade Gases**



The food industry has special demands on the quality of gases. Food grade gases are defined as gases used as a processing aid and/or additive in order to ensure compliance with standards. Company's food grade gases conform to food grade regulations, e.g. the EC directive on food additives within the EU countries.

AGA

AGA, Ltd. 5 Katrinas Street, Riga LV-1045, Latvia Phone: (+371) 67023900

A Member of The Linde Group

#### CC road®



CC Road Calcium chloride provides the ideal solution for dust binding. Calcium chloride binds fine particles to the road surface. Dust is an essential element in a gravel road, as it binds small stones to the road.

#### ALGOL CHEMICALS

ALGOL CHEMICALS, Ltd. offers wholesale and distribution of chemical raw materials for various industrial applications.

#### Dowcal 100®



New DOWCALTM 100 heat transfer fluid is an ethylene glycol-based fluid for use in a wide range of industrial, pharmaceutical, HVAC and heat recovery applications, including applications requiring corrosion protection at lower concentrations of glycol.

DOWCALTM 100 is a reliable and consistent formulation that provides long-lasting protection and performance.

#### ALGOL CHEMICALS

ALGOL CHEMICALS, Ltd. Asarisi 3, Marupe Parish LV-2167, Latvia Phone: (+371) 67796881



# Rubber compounds



Database of the Company includes wide-ranging assortment of rubber compound formulations, based on the different types of rubber, such as NR, EPDM, SBR, NBR, BR, IR, CR, silicon (Q), as well as FKM – for extreme operating condition.

By using wide range of highly qualitative raw and work materials our specialists promptly develop new and improve existing formulations of rubber compounds.

#### BALTIJAS GUMIJAS FABRIKA

Baltijas gumijas fabrika, JSC is the largest manufacturer of rubber compounds and rubber technical articles in the Baltic States with complete manufacturing cycle – starting with the development of products and rubber compounds formulation and finishing with its batch production.

Company has great experience and extensive possibilities in the delivery of rubber compounds and rubber technical products to European Union, CIS countries.

#### Rubber technical articles



Moulded rubber technical articles are manufactured by using compression and injection presses.

The greatest attention in the manufacturing of rubber technical articles is paid to the component parts, including parts for railway and public transportation, construction and engineering manufacture.

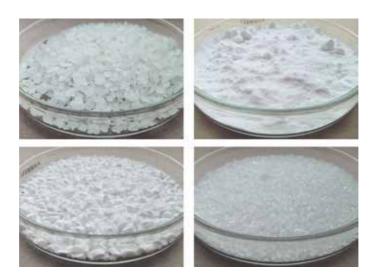
#### BALTIJAS GUMIJAS FABRIKA

BALTIJAS GUMIJAS FABRIKA, JSC 87D-2 Vienibas gatve, Riga LV-1004, Latvia Phone: (+371) 67187534

www.bgfrubber.lv



# 2,2'- AZOBISISOBUTYRONITRILE (AIBN)



# description

2,2'- azobisisobutyronitrile (AIBN) is the best known azo initiators which are easy and safe to use in free radical polymerization catalyst in the processing temperature range of 45-90 °C, a primary criterion in controlling polymerisation reactions (Initiator for the (co) polymerization of styrene, vinyl chloride, vinylidene chloride, acrylonitrile, acrylates and methacrylates.).

# function

2,2'- azobisisobutyronitrile (AIBN) is used in polymerisation reactions and as blowing agent.

## ingredients

Pure product. CAS No. 78-67-1 EC No. 201-132-3

#### RIOI AR

Olaine chemical plant BIOLAR, JSC - is one of the leading chemical enterprises in Baltic States and the leading producer of Azo-initiators in Europe. Company produces different types of Azo-initiators (AIBN, AIVN, etc.). Production of raw materials for paint and varnish industry: drying accelerators, resins, lacquers, plasticizers. As well production of pure Acetonitrile, and other products of difficult organic synthesis.

## **DIBUTYL SEBACATE (DBS)**



# description

Dibutyl sebacate (DBS) is the most efficient plasticizer. Provides excellent compatibility and superior low temperature properties to a variety of polymers. Provides products a high cold-resistance at low temperatures, light and water resistance. Non-toxic and can be used in products that come into contact with food and pharmaceutical products.

#### function

DBS is used in the manufacture of fiberglass and for plasticization.

## ingredients

Pure product. CAS No. 109-43-3 EC No. 203-672-5

#### BIOLAR

OLAINE CHEMICAL PLANT BIOLAR, JSC 3 Rupnicu Street, Olaine LV-2114, Latvia Phone: (+371) 67964010



#### **CHEMISEPT FG**



# description

Chemisept FG is an effective agent for fast disinfection and prevention of foot fungi. The product has a wide fungicidal and bactericidal effect, being able to destroy Gram-positive and Gram-negative bacteria and viruses. It is very effective against dermatophytes, yeast and mould fungi.

# function

Agent for fast disinfection and prevention of foot fungi.

## ingredients

Active ingredients: ethanol 62%, QAV 0.25%

#### CHEMI PHARM GROUP

Chemi Pharm group, Ltd. develops, produces and sells allergen-free disinfection agents, cleaning and maintenance products, and luxury skin care line. Products are exported to 17 countries; the company's main customers are in medical sector.

#### **BIO-DERM CARE**



# description

Bio-Derm Care is a skin restoring cream for daily care. It is intended for use on normal, dry and damaged skin. Bio-Derm Care contains nourishing and moisturizing agents for the skin. The product is especially suitable for use in medical institutions, where frequent washing and disinfecting of hands is necessary, which may damage the skin's natural protective cover.

# function

Skin restoring cream.

#### CHEMI PHARM GROUP

CHEMI PHARM GROUP, Ltd. 23 Ritausmas Street, Riga LV-1058, Latvia Phone: (+371) 29453760

F CHEMI-PHARM

# Gases in road tankers and storage tanks



The most economically effective way to supply "medium" volumes is to transport and store them as cryogenic liquid and compressed gases in road tankers. We provide our products in insulated storage containers with vaporizers or in pressure vessels on your site.

#### FLME MESSER I

ELME MESSER L, Ltd. is the leading gas company in the Baltic region. Founded in 1999 as a joint venture between JSC BLRT GRUPP (Estonia) and MESSER GROUP (Germany). Company offer everyone the factors of success of company's customers: 120 years of experience in the gas market, reliable partnerships, the best quality / price ratio, excellent distribution and companys's ambitions.

# **Medical gases**



ELME MESSER L, Ltd. produces and distributes medical gases in accordance with the requirements of European Pharmacopeia and in line with European GMP guidelines. The medical business is divided into the fields of institutional care and home care, which are supplied with a variety of medical gases:

Medical oxygen, liquid and gaseous Nitrous oxide, medical Air, medical Nitrogen, liquid Carbon dioxide, liquid and gaseous Helium Special medical gas mixtures and pulmonary function gases

#### ELME MESSER L

ELME MESSER L, Ltd. 9 Katlakalna Street, Riga LV-1073, Latvia Phone: (+371) 26520419



# Porplastic track surfaces



For more than four decades, Porplastic PUR / rubber granules systems have achieved an excellent track record as sporting surfaces used in mass sports (school sport facilities, running and run-up tracks, playing fields for ball sports and multi-purpose playing fields, tennis courts, etc) as well as the optimum surface for pros when performing during top-class level national or international competitions and tournaments.

#### GLIMI MIX GROLIP

GUMI MIX GROUP, SIA is engaged in the improvement works of sports facilities already since 2004. Rubber coverage is especially suitable for the professional sports fields and children's playgrounds. It complies with the high DIN V 18035/6 and International Association of Athletics Federations (IAAF) standards and are widely used all around the world. GUMI MIX GROUP, SIA provides full service and uses the most advanced coverage application equipment.

#### **EUROTRAMP®**



Playground trampoline EUROTRAMP® Approved and accepted by TÜV Product Service according to the playground standard DIN EN 1176. Suitable for the unattended and freely accessible playground area with high vandalism safety (jumping bed made of wire reinforced belt fabric). Easy to install The Kids Tramp is already completely mounted when it is delivered, all that is needed is to glue the bonded impact protection on the frame and set it into a pit.

#### GUMI MIX GROUP

GUMI MIX GROUP, SIA Vienibas gatve 87D, Riga LV-1004, Latvia Phone: (+371) 26440247



#### **EWOL Professional**



EWOL Professional product range includes detergents and disinfection products (including soap) provided for public organisations – medical, educational, catering and other institutions. Wide assortment allows every institution to find detergents and disinfection products suitable for its needs and specifics and for a reasonable price.

#### MPILL

JUSMA, Ltd. main business activity is manufacturing of professional and ecologically clean products for the medical and educational establishments, food manufacturing and catering companies, as well as other public institutions. In total our portfolio consists of more than 40 different products. Product range is purposefully organised in order every company or organisation could find the detergents and disinfection products exactly for its function and budget.

### **LIDEKS**



LIDEKS is the oldest product line of the company, providing detergents and disinfection products that are more suitable for professional companies, for example, companies in the cleaning business. Formula of products are more specific, products are developed to meet very high requirements and provide special functions.

#### JUSMA

JUSMA, Ltd. 2-623 Citadeles Street, Riga LV-1010, Latvia Phone: (+371) 29475487 Guima

# MAGA, mosquito and tick repellents



### description

Effective repellents against mosquitoes, ticks, bot-flies and similar insects. Should be applied on uncovered body surfaces or on clothes. Have fresh and pleasant aroma.

Volume: 150ml, 100ml, 60ml, 50ml

#### function

Repellent

### ingredients

Deet, geraniol, ethanol, glycerin.

#### KVADRC

KVADRO, Ltd. is manufacturer of wide range of chemical products in aerosol and other packaging: household cleaning products, mosquito and tick repellents, cosmetics, car care products, shoe care products, air fresheners, insecticides, ECO cleaning and washing products, professional cleaning products. Company offers private label deals: contract manufacturing and packaging. Full filling service in wide product range: household, cosmetics, tehnical and automotive products, mosquito and tick repellents.

# ECOIDEA, bathroom and kitchen, grease cleaner 700ml



# description

Environmentally friendly cleaners for kitchen and greasy surfaces (sinks, tables, stoves, tiles, accessories etc.) and all types of sanitary facilities and surfaces (tiles, shower stalls, water taps, sinks, acrylic surfaces, baths etc.). Does not contain phosphates, colorants and chlorine.

### function

Cleaners

# ingredients

Water deionised, citric acid, glucopon, calcined soda, marlinat

#### KVADRC

KVADRO, Ltd. 71 Liela Street, Riga LV-1016, Latvia Phone: (+371) 26669582





#### Eltex® PF6212AA



## description

Eltex® PF6212AA is a metallocene LLDPE grade produced in Europe. Eltex® PF6212AA is a polyethylene copolymer containing hexene-1 as the comonomer produced with a metallocene catalyst.

It offers the following properties:

- Extremely high impact strength;
- Excellent optical properties;
- Very good bubble stability and extrudability;
- Low temperature sealing characteristics.

#### function

In food packaging and other thin film where mechanical and optical performance is required.

# ingredients

Metallocene LLDPE

#### POLYSTYLEX

Polystylex, Ltd. is a fast growing distributor of polymer raw materials in East Europe. Established in 2009, Polystylex, Ltd. has successfully developed cooperation with leading European polymer producers and has gained a reputation of reliable supplier in Baltic region and Russia.

#### **EBA B26E730**



# description

Polyethylene EBA Copolymer for Blown film - Ethylene Butyl Acrylate copolymer, containing 11% butyl acrylate.

B26E730 has been developed to give a very strong and tough film with excellent cold and outdoor properties

# function

- · Stretch hoods;
- · Construction film;
- · Heavy-duty bags.

# ingredients

Ethylene Butyl Acrylate copolymer, containing 11% butyl acrylate.

#### POLYSTYLEX

POLYSTYLEX, Ltd. 20 Liliju Street, Marupe LV-2167, Latvia Phone: (+371) 66660461



# PENTAPRIM universal alkyd enamel for wood and metal



# description

Easy-to-apply universal gloss paint with excellent adhesion to various substrates, including new and previously painted metal and wooden surfaces. Enamel is characterized by long lasting gloss, good mechanical resistance. Enamel is intended for painting of wooden, primed metal surfaces, wooden-fiber and particleboards both during interior and exterior works.

# function

May be used for interior and exterior works.

#### RIGA VARNISH AND PAINT FACTORY

Riga Varnish and Paint Factory, Ltd. is among the largest manufacturers of paints and varnishes in the Baltic States with a history and experience reaching back more than one hundred years. The company was founded in 1898. Company's products may be identified by their RILAK brand. Company offer a broad range of products for construction and repair works – from priming products to paints for interior decoration and facade paints.

# MOVILAT-7 matt paint for walls and ceilings with slight silky (eggshell) gloss



# description

Fast - drying easy - to - apply water - based paint with great adhesion to new and previously painted plaster, concrete, brick, gypsum board and different types of wallpaper surfaces. The paint is characterized by good spreading capacity and resistance to cleaning solutions, significant vapour permeability. Non - dripping during the application.

# function

It may be tinted to many shades.

#### RIGA VARNISH AND PAINT FACTORY

RIGA VARNISH AND PAINT FACTORY, Ltd. 63/65 Daugavgrivas Street, Riga LV-1007, Latvia Phone: (+371) 67458776

www.rilak.lv



# **SAKRET SIP Silicone decorative plaster**



# description

- · Ready-made;
- Product contains substances that prevent formation of microorganisms' colonies;
- · Lighter than mineral plaster;
- Excellent water repulsion qualities in case of atmospheric precipitation;
- Better longevity in comparison with SAKRET AP;
- Very high water vapour penetrability;
- · Good adhesive qualities;
- · Easy to take care of;
- Wide choice of tones;
- Does not contain solvents.

#### function

- In thermal insulation systems of buildings;
- · For interior and exterior works.

# ingredients

- · Silicone polymer dispersions;
- · Inert fillers;
- · Additives.

#### SAKRET PILIS

SAKRET PLUS, Ltd. is a construction chemicals manufacturing company founded in 2005. Main business activities are manufacturing of paint, fillings, decorative plasters and similar coverings. Company has been awarded in the Baltic States and Scandinavia for the manufacturing of innovative materials and exports development. SAKRET PLUS, Ltd. continuously works on development of new and innovative products and materials.

#### **SAKRET LH Universal filler mastic**



# description

- For filling of different kinds of surfaces in thin and average thickness layers;
- Cement or gyps plastering;
- Gyps cardboard;
- · Concrete;
- Aerated concrete;
- · Wooden-fibre or chip boards;
- · Ready for use;
- · Easily applicable and grind able;
- · Small shrinkage;
- Brightly white, with good coverage;
- Does not contain solvents.

#### function

- · For interior works;
- · For walls and ceilings finish.

# ingredients

- · Water polymer dispersion;
- · Inert fillers;
- Additives

#### SAKRET PHIS

SAKRET PLUS, Ltd. Ritvari, Rumbula, Stopinu Municipality LV-2121, Latvia Phone: (+371) 29241309



### Chemicals



# description

Solvents, reagents, binders, fillers, pigments, polyurethane systems. Raw materials for different industries: construction, coatings, paper and printing, automotive chemicals, medical and cosmetics, food industry and other industry.

#### function

Raw materials for industry

Solvents: isopropanol, alcohol mixtures; dipropylene glycol, monopropylene glycol, other glycols.

#### TFI KO I ATVIA

Telko Latvia, Ltd. is a wholesaler of chemical and polymeric raw materials. Company supplies chemical and polymeric raw materials to manufacturing companies in various industries, provides technical support and solutions – starting from planning of logistics up to development of new products. Telko Group has companies in the Northern Europe, Eastern Europe and Asia.

#### Car chemicals



# description

Polar grades: antifreeze, washing liquids, brake fluids. Heat transferring fluids Polarterm and Freezium. Can be used in various heating, ventilation and conditioner systems.

### function

Automotive motor coolant, windshield washing, brake hydraulics. Thermo management.

TELKO LATVIA, Ltd. 75 Ciekurkalna 2nd Line, Riga LV-1026, Latvia Phone: (+371) 67840531



#### TENAGLASS®-PU FR



# description

TENAGLASS®-PU FR is a two -component polyurethane-based composite material which is used as a secondary sealant in the production of insulating glass units (IGU) with dual seal. TENA-GLASS®-PU FR has fine-tuned application properties to meet the expectations of IGU manufacturers. This product is intended for professional use only.

# function

Two - component polyurethane based secondary sealant for insulating glass units

### ingredients

Polyurethane-based polymer, fillers, plasticizers

#### TENACHEM

Tenachem, SIA was established in 2008, as a daughter company of TENAX, Ltd. and since then has expanded to become one of the leading European manufacturers of sealants for the glass industry, the largest sealant producer in the Baltics. Tenachem, SIA supplies its products to a number of large, international glass processing firms. The company's strong position is due to its pioneering R&D and its ultra-modern production facility located in Dobele, around 70 kilometres from Riga.

#### TENAGLASS®-PS EN



# description

TENAGLASS®-PS EN is a two -component polysulphide-based composite material which is used as a secondary sealant in the production of insulating glass units (IGU) with dual seal. TENA-GLASS®-PS EN has fine-tuned application properties to meet the expectations of IGU manufacturers. This product is intended for professional use only.

# function

Two - component polysulphide - based secondary sealant for insulating glass units

# ingredients

Polysulphide-based polymer, fillers, plasticizers

#### TENACHEM

TENACHEM, SIA 3 Spodribas Street, Dobele LV-3701, Latvia Phone: (+371) 637 22390



# IMPREGNATED GLASS FIBRE MESH



Woven glass fibre mesh is manufactured of alkali-free alumina borosilicate E-type glass fibre yarns and / or roving. It is constructed in leno or plain weave and comes in different mesh sizes. The mesh can be supplied as loom-state fabric or coated with an impregnating agent, which stabilizes the weave pattern and ensures excellent alkali resistance. This impregnation meets the requirements of the building industry.

Impregnated glass fibre mesh is used: in outside thermal insulation systems of buildings, for indoor plaster strengthening - for the repair of walls, floors and ceilings, and for provision of high mechanical strength.

#### VALMIERAS STIKLA ŠKIEDRA

VALMIERAS STIKLA ŠĶIEDRA, AS is one of the leading European manufacturers of glass fibre-based products. Headquartered in Latvia, VALMIERAS STIKLA ŠĶIEDRA, AS also has companies in the United Kingdom and in the United States. With more than 50 years of experience in glass fibre production, the GROUP's companies service industrial markets, including composites, thermal and technical insulation and construction industries.

# COATED GLASS FIBRE FABRICS



Coated glass fibre fabrics for industrial insulation as well as for fire and smoke protection are made from alkali free alumina borosilicate E-type glass fibre yarns.

Coated glass fibre fabrics come in various thicknesses depending on the application. Company offer materials for almost any application: fire/smoke protection, thermal or acoustic insulation in power supply, automotive, metal and aviation industries, shipbuilding, construction etc.

#### VALMIERAS STIKLA SĶIEDRA

VALMIERAS STIKLA ŠĶIEDRA, AS Cempu 13, Valmiera LV-4201, Latvia Phone: (+371) 64202216

VALMIERA® GLASS

# **Proposept Lip Balm**



Beeswax ointment with propolis extract and sea buckthorn oil. Proposept possess antibacterial, antiseptic, anti-inflammatory, anti-virus (especially herpes) and local anaesthetic, which promotes epithelization of damaged tissue, effect. Softens tissues, promotes epithelization without scab formation. Beeswax helps forming a protective layer on the lips that works against harmful environmental effects by reducing the irritating effect on the lips.

#### DFIRC

DEIRO, Ltd. Is a manufacturer of bee wax, propolis, honey, pollen, herbal oils and extracts.

#### **Bite Facial Cream**



Cream provides nourishing, soothing and softening effect, creates protective layer that prevents chapping of the skin.

Use for the prevention and care of skin and mucous membrane damages; applying on a clean skin several times a day and gently massaging into the skin.

#### DEIRC

DEIRO, Ltd. 1 Alfreda Kalnina Street, Riga LV-1050, Latvia Phone: (+371) 29524779



# Hand dishwashing balm



### description

Environmentally friendly product for home, family and nature. Reduced impact on aquatic ecosystem. Without phosphates and colorants. Washing agents are biodegradable. Recyclable packaging. Safe for humans and the environment throughout its life cycle - from the production until entering the environment. Product is EU Ecolabel certified.

#### function

Provides efficient and environmentally friendly dishwashing.

# ingredients

Anionic surfactants ≥ 5% < 15%, perfume, Methylisothiazolinone, Benzisothiazolinone

#### SPODRIRA

Spodriba, JSC is the largest manufacturer of household chemicals and cosmetics in Latvia. The dawn of company dates back to 1921. It has accrued more than 95 years of experience and offers a large range of products with the brand name Seal. Which include more than 200 household chemical and cosmetic products. In the nearest future company plans to develop manufacturing of cosmetics further.

# Liquid cream soap



# description

Gently cleansing liquid cream soap with a balanced pH, suitable for everyday care. Paraben and colorant free. Reduced impact on aquatic ecosystems. Fullfils strict biodegradability requirement. Human and environmentally friendly product. Recyclable packaging. Product is EU Ecolabel certified.

### function

Gently cleanses skin of hands.

# ingredients

Aqua, Sodium Laureth Sulfate, Sodium Chloride, Coco-Glucoside, Cocamidopropyl Betaine, Styrene/Acryl

#### SPODRIBA

SPODRIBA, JSC 1 Dzirnavu Street, Dobele LV - 3701, Latvia Phone: (+371) 63722311





#### SolarGel Nail Polish



SolarGel is a 2-step latest generation nail polish system which uses elements of gel polish to achieve superior shine and give it a gel-like look whithout drying in lamp. It has scratch resistant top coat providing longer wear time compared to traditional nail polish.

### KINETICS NAIL SYSTEMS

KINETICS NAIL SYSYTEMS, Ltd. blend beauty aesthetics with innovative formulas, resulting in high performance products. Design matters, so company manufacture a memorable, professional nail cosmetic range that's fashionable, of superior quality and that expresses individuality.

#### SHIELD Gel Polish



Shield gel polish is a classic 3 step professional formula with wide color range and highly pigmented formula. It cures in both - UV and LED lamps. All Shield colors are available also in SolarGel Professional Nail Polish formula.

#### KINETICS NAIL SYSTEMS

KINETICS NAIL SYSYTEMS, Ltd. 3K Kurzemes prospekts, Riga LV-1067, Latvia Phone: (+371) 29241271

kinetics

# Ointment - Larifan Ungo



# description

LARIFAN UNGO is a remedy for skin and mucosa care. The ointment includes a patented natural origin component dsRNA LARIFAN which provides ointments additional value. dsRNA Larifan increases body's local resistance to adverse environmental factors, including protection of the body against viral penetration.

#### function

Protects and heals from different viruses, including influenza, herpes, warts.

# ingredients

Natural origin component dsRNA LARIFAN

These product descriptions are informative and not for commercial purposes.

#### **LARIFANS**

Larifans, Ltd. produces medical products and cosmetics, based on the original pharmaceutical active substance dsRNA Larifan. The original active substance is developed at the 1976, commercial production is being performed since 1994.

Larifan is an immunomodulator, interferon inducer of natural origin with a broad spectrum of action. Larifan is used in fields such as immunology, virology, oncology, etc. Larifan widely is used for the correction of the immune system at different viral disease mainly.

# Lip balm LARIFAN



### description

Lip balm LARIFAN is created for lips and mucous membrane care and protection.

Lip balm LARIFAN is an efficient remedy for body's natural resistance regulation, thus protecting against harmful external environmental factors (including viruses, bacteria).

### function |

Protects and heals from different viruses, including herpes, influenza etc.

### ingredients

Natural origin component dsRNA I ARIFAN

These product descriptions are informative and not for commercial purposes.

#### **LARIFANS**

LARIFANS, Ltd. Kurbada Street 2B, Riga LV-1009, Latvia

Phone: (+371) 67427462



# **Fragrances**



Company have been developing and producing fragrances for personal care, home care and car care category products since 1980. Company's fragrance banks holds over 9000 fragrances of various smell directions up to date.

#### **LORI**

Lori, Ltd. stride to provide the best quality to clients through creativity of company's perfumers, thoroughness of R&D, strict adherence to quality control measures and sales fleet-footedness. Lori, Ltd. consider company's work to be done well only if it results in creation of a commercially successful product together with customer. Before being placed on company's offer list, fragrance creations undergo a series of compatibility and stability tests in various product model bases.

#### **Essential Oils**



Company have been using essential oils in production for more than 20 years. The essential oils are chosen with due diligence by specialists to guarantee the best quality. In response to growing interest for essential oils and essential oil blends as of 2016 company introduces essential oils to companiy's offer portfolio.

#### LORI

LORI, Ltd. 21 Kruzes Street, Riga LV-1046, Latvia Phone: (+371) 26104155



#### PLANT STEM CELL AGE-DEFYING FACE SUNSCREEN



# description

This breakthrough mineral-based natural face sunscreen ensures broad spectrum UVA/UVB protecion with an invisible, flawless finish. Ultra light, subtly tinted texture. Delivers a hyperdose of antioxidants, shields against urban pollution, protects the skin microbiome and regenerates the skin for a 360° age-defying effect.

#### function

Works to prevent all types of sun damage, including dryness, wrinkles, pigmentation, dark spots.

# ingredients

Patent - pending stem cells from Northern Dragonhead, Zinc Oxide, Hyaluronic Acid, Raspberry seed oil.

#### MADARA COSMETICS

MADARA COSMETICS, Ltd. manufactures certified organic and natural skincare products, using organic and natural raw materials, recyclable or post-consumer recycled packaging and processing/manufacturing techniques that are clean and respectful of human health and the environment. With 97% of plant-based ingredients being certified organic, MADARA COSMETICS, Ltd. promotes organic agriculture and biodiversity, restricts the use of chemicals, such as pesticides, and harmful chemical processing.

#### **RE:GENE VOLUME REBUILD LIFTING MASK**



### description

This natural and certified non-invasive treatment delivers visible lifting, plumping and wrinkle-smoothing results to give your skin back its youthful V-shaped contours.

### **function**

The luxurious, creamy texture nourishes and comforts the skin leaving it smooth and silky soft.

### ingredients

Revitalising birch water, biotechnologically derived amino lipid and cell repair bio-complex.

#### MADARA COSMETICS

MADARA COSMETICS, Ltd. 131 Zeltinu Street, Marupe, Marupe Municipality LV-2167, Latvia

Phone: (+371) 66154800



# Laboratory equipment and devices



Biocon, Ltd. offers laboratory equipment and consults clients about latest technologies and innovations in this area, as well as performs medical laboratory examinations.

#### BIOCON

Biocon, Ltd. offers services both to patients and medical institutions. Laboratory provides in-depth specialization in various fields, for example, performs wide spectrum of allergen detection tests, molecular analysis, as well as performs tests upon individual request. In considering scientific achievements allowing to provide in-depth study and analysis of development of various diseases, Company can perform respective tests and provide analysis of results in cooperation with specialists in Latvia or partners abroad.

# Laboratory



Laboratory develops and implements its quality system in compliance with the requirements of LVS EN ISO 15189 standard, including pre-analytic phase, correct diagnostics, post-analytic phase and fulfilment of client requirements within possibility margins.

# BIOCON

BIOCON, Ltd. 1 Grebenscikova Street, Riga LV-1003, Latvia Phone: (+371) 67672332



#### ChromSwordAuto



# description

Based on theory and practice of liquid chromatography ChromSword, Ltd. Auto software significantly saves time and money for HPLC method development. Unique fully automated HPLC method development software enables you to develop and optimize methods even for most complicated mixtures in record time.

### function

Unique procedure for rapid HPLC and UHPLC method development and optimization.

#### features

Method development for reverse - phase, ion - pair, normal - phase and ion - exchange chromatography.

#### **CHROMSWORD**

ChromSword, Ltd. holds leading positions in automation of method development. Company's intelligent software is used at different largest pharma laboratories worldwide. ChromSword, Ltd. team is a group of high skilled HPLC and IT specialists that transfer their knowledge in powerful method development and validation software.

#### **AutoRobust**



### description

According to the ICH robustness should be considered at an appropriate stage in the development of the analytical procedure. AutoRobust is a software for automatic evaluation of robustness of HPLC methods, making it robust and have no problems with the method transfer.

### **function**

AutoRobust enables vou to explore stability of HPLC methods fully automatically.

#### *features*

Up to 9 variables and factors to test stability of your method and evaluate during robustness study.

### **CHROMSWORD**

CHROMSWORD, Ltd. 38 Daugavas Street, Marupe LV-2167, Latvia Phone: (+371) 22515444



# Calibration and testing laboratory



ISO-17025 accredited calibration and testing laboratory. Calibration of plunger activated liquid handling devices like pipettes and titrators; cleanrooms, clean benches and cabinets qualification; thermally controlled chambers (autoclaves, incubators, freezers) testing and qualification.

#### **FANEKS**

Faneks, SIA offers in the Baltic market equipment for manufacturing, research and analysis, laboratory supplies and services, equipment maintenance and construction, as well as testing and calibration of measuring equipment. The company has 17 employees who ensure high quality sales, delivery and service processes. Older and younger generations with experience in laboratories and manufacturing are represented in the company.

# **Chromatography laboratory**



ISO-9001 accredited method development laboratory. Development of HPLC and UPLC and LC/MS methods for pharma and food supplement industry. Contract analysis of pharmaceuticals, food supplements, extracts.

## **FANEKS**

FANEKS, SIA 17-1 Kalna Street, Riga LV-1003, Latvia Phone: (+371) 29579789



## **Consultations and Expertise for Cosmetics**



Consultations for Cosmetics manufacturers according to Latvian and European Legislation. Preparation of Safety Assessment of Cosmetics, according to EC Regulation 1223/2009, notification in EU CPNP-Cosmetic Product Notification Portal. Comapany help manufacturers to prepare for GMP, according to EN ISO Standard 22716 - Cosmetics - Good Manufacturing Practices. Expertise of formulas and other documents.

#### GE&AL INDEPENDENT EXPERT BUREAU

GE&AL Independent Expert Bureau, Ltd. operates as CRO – Contract Research Organization – in the cosmetic products research area since 2010. During the operation period, company has provided consultations and expertise to more than 35 clients based on short-term or long-term agreement. Company's clients are not only from Latvia, but also from Israel, Russia, Poland, Belorussia, as well as manufacturers, importers and distributers of cosmetic products and biologically active ingredients from other countries.

# **Consultations and Expertise for Food Supplements**



Consultations for Food Supplements manufacturers according to Latvian and European Legislation. Expertise of documents (MSDS, test reports, certificates etc.) according to Latvian and European Legislation. Notification & Registration Preparation of documents for Food Supplements notification and registration in the database of the Food and Veterinary Service of Latvia.

### **GE&AL INDEPENDENT EXPERT BUREAU**

GE&AL INDEPENDENT EXPERT BUREAU, Ltd. 32 Jurmalas gatve, Riga LV-1083, Latvia Phone: (+371) 26040398



# Management of chemicals



Development of various chemicals are very rapid, research as to their impact on health and environment is lacking, thus various norms and regulations are developed regulating activities before launching of chemicals into market. Services related to the field of chemicals are developed based on laws and regulations of Latvia and EU.

## Latvian Environment, Geology and Meteorology Centre (LEGMC)

Latvian Environment, Geology and Meteorology Centre (LEGMC) collects and manages environmental data, providing objective and reliable information about environment to public, state and municipal institutions, prepares reports on weather forecast and warnings, performs climate change analysis, environmental monitoring and supervision of subsoil resources and insurance of rational subsoil use, as well as implements state policy related to geology, hydrology, meteorology, climatology, air quality and cross-border air pollution areas.

# Radioactivity testing and individual dosimetry



LEGMC laboratory offers radioactivity testing and individual dosimetry; provision of radiation measurements in water samples, construction materials and objects for various types of radiation. Laboratory is the only one in Latvia that performs water quality measurements accordingly to requirements of the Latvian and international standards.

Secondary standard dosimetry laboratory is the only in Baltics that provides calibration services of dosimeters, radiometers and measuring instruments with gamma, X-rays, alpha and beta rays, dosage capacity measurements in certain points etc.

LEGMC laboratory also offers water analysis; biological analysis; microbiological analysis; soil, sediment, sludge, plant and other solid environmental sample analysis; air and emission analysis.

# Latvian Environment, Geology and Meteorology Centre (LEGMC)

Latvian Environment, Geology and Meteorology Centre (LEGMC) 165 Maskavas Street, Riga LV-1019, Latvia Phone: (+371) 67032600



## Preclinical drug discovery



LIOS executes a complimentary set of drug discovery and development tasks which includes synthetic hit-to-lead and lead-to-CD programs, compound design, biological activity determination and ADMET profiling. The drug discovery tasks can also be integrated with research activities performed by collaboration partners.

### LATVIAN INSTITUTE OF ORGANIC SYNTHESIS

Latvian institute of organic synhesis is an independent public research institute since 1957 performing research in organic and medicinal chemistry, pharmacology, bioanalytics and biophysics one of the leading research institutions in Latvia, 236 FTE employees, including 189 PhD and MSc over 60 years experience in the drug design and technology development an inventor and co-inventor of 18 original approved drugs and more than 70 original preparation methods of known medicines located in Riga.

# **Process chemistry of APIs**



LIOS performs route scouting for the manufacturing of original and generic APIs. This includes the design, development and optimization of synthetic and analytical protocols according to the manufacturing requirements. The selected routes are validated in the kilo-scale laboratory of LIOS.

### LATVIAN INSTITUTE OF ORGANIC SYNTHESIS

LATVIAN INSTITUTE OF ORGANIC SYNTHESIS 21 Aizkraukles Street, Riga LV-1006, Latvia Phone: (+371) 67014801



## **Biotechnologist**



# description

Biotechnologist works in biochemical industry companies, food manufacturing companies applying biotechnological methods in the product manufacturing, as well as in the biochemical and microbiological laboratories of the above-mentioned companies.

### education

secondary education Length of studies: 2.5 years

### MECHANICS AND TECHNOLOGY COLLEGE OF OLAINE

Mechanics and technology college of Olaine provide the opportunity to obtain first level vocational higher education in four qualifications for young people after high school and for every interested person with secondary education. Vocational higher education with qualifications in the following courses: Environmental protection technology – environmental technologist, Biotechnology – biotechnologist, Quality control of food products – food quality specialist, Food processing and manufacturing technology – food processing specialist.

# **Environmental technologist**



# description

Environmental technologist works in organizations applying environmental technologies, develops, designs and implements technological solutions providing environmental technologies an environmental quality.

# education

secondary education Length of studies: 2.5 years

## MECHANICS AND TECHNOLOGY COLLEGE OF OLAINE

MECHANICS AND TECHNOLOGY COLLEGE OF OLAINE 2 Zeiferta Street, Olaine LV- 2114, Latvia Phone: (+371) 67962141

www.omtk.lv



## **Screening Compound Database**



MolPort, Ltd. has collected catalogs of all major chemical suppliers that cater to drug discovery and created a database of commercially available compounds. These catalogs are up to date and synchronized with supplier inventory daily, for most products.

#### **MOLPORT**

MolPort, Ltd. is a chemical compound marketplace that lists 7+ million stock compounds from 65+ suppliers. More than 80% of company's available products database is synchronized with supplier data on a daily basis. Through frequent reliability checks, company know each supplier's specifics, costs, and delivery days. If client are looking for a single hard-to-find compound, sourcing thousands of compounds for a project or researching analogue synthesis for client's hits, through MolPort, Ltd. client can do it quicker, simpler and with higher reliability.

## Online rare chemical shop







documentation

Molport.com is an internet site that consolidates many suppliers of chemical compounds into one, easy - to - use catalogue and integrates it with simple ordering service, making an effective compound purchasing solution. MolPort.com is to chemicals what Amazon.com is to books.

### **MOLPORT**

MOLPORT, Ltd. 41 Lacplesa Street, Riga LV-1011, Latvia Phone: (+371) 67790398



### **Education**



Custom synthesis of organic compounds; Synthesis of Pharmaceutical Reference Substances and Impurities; Synthesis of compounds for screening and pharmacological studies; Process development for Synthesis of organic substances; NMR, HPLC- MS, GC-MS, IR, UV-VIS and optical studies of organic compounds.

### RĪGA STRADIŅŠ UNIVERSITY

Rīga Stradiņš University (RSU) has been recognised as the best university with the highest reputation in Latvia, gaining the highest rating among the 10 largest universities in Latvia according to a study of the reputation of Latvian universities conducted by market research company Kantar TNS. Export champion – for the 11th year in a row, the Investment and Development Agency of Latvia together with the Ministry of Economics, announced the Export and Innovation Award and Rīga Stradiņš University was awarded the title of Export Champion.

#### Research



During studies at the Faculty of Pharmacy students have to carry out a large amount of laboratory work in groups and individually. Chemistry courses are devoted to synthesis and analysis. When studying the technologies of drug preparation, students have to prepare drugs of various dosage forms – capsules, pills, creams, ointments, and solutions. The study course Social pharmacy emulates real-life situations in pharmacy. The acquired skills in consulting patients are tested by the Objective Structured Clinical Examination (OSCE).

## RĪGA STRADIŅŠ UNIVERSITY

RĪGA STRADIŅŠ UNIVERSITY 16 Dzirciema Street, Riga LV-1007, Latvia Phone: (+371) 67409230





## **Programs**



Chemical technology, Chemistry, Applied Chemistry, Industrial Pharmacy (joint studies program with Riga Stradins University), Nanotechnologies of Materials and Materials Science – RTU is the only one provider of these studies programs (except program Chemistry) in Latvia. The total number of FMSAC students ranges from 550 to 600, of which about 250 are students studying in above mentioned programs.

### RIGA TECHNICAL UNIVERSITY

The Faculty of Materials Science and Applied Chemistry (FMSAC) has the highest research potential, external funding, developed research infrastructure and is ranked among the best at Riga Technical University (RTU). FMSAC carries out research projects and contract work ordered by chemical industry. FMSAC provides a range of academic bachelor, master and doctoral level studies programs concerning chemical industry.

# Study process



The program Chemical technology envisages basic theoretical education in chemistry and chemical engineering, acquisition of practical skills in teaching and research laboratories, as well as practice in specialty.

## RIGA TECHNICAL UNIVERSITY

RTU Faculty of Materials Science and Applied Chemistry 3/7 Paula Valdena Street, Riga LV-1048, Latvia Phone: (+371) 67089224



# Methods for quality control



## description

Determination of metalic element content by XRF, ICP-MS and ETAAS methods;

Analysis of phase composition by powder X-ray diffraction;

Identification and quanitative analysis of reaction intermediates and products by chromatographic and spectrometric methods.

## function

Development and validation of product quality contol methods.

### UNIVERSITY OF LATVIA

The University of Latvia currently, with its more than 15 000 students, 13 faculties and 19 research institutes and independent study centres, is one of the largest comprehensive and leading research universities in the Baltics and is recognized amongst other European universities. The University offers more than 150 state accredited academic and professional study programmes with its scientific potential providing contribution into the Latvian national economy and sustainable development of the society.

# Stability of pharmaceutical compounds



## description

Termal conditions of phase transitions of APIs:

The influence of moisture and solvents on phase transition;

Construction of phase diagrams to describe the stability of hydrates and solvates;

Investigation of formation and structure of API crystalline forms

## function

Determination of stability and phase diagrams of APIs.

### UNIVERSITY OF LATVIA

UNIVERSITY OF LATVIA 19 Raina Blvd., Riga LV-1586, Latvia Phone: (+371) 67033900





The Association of the Latvian Chemical and Pharmaceutical Industry (LAKIFA) since 1995 brings together more than 60 companies involved in the manufacturing and distribution of pharmaceuticals, chemicals and chemical reagents, cleaning products, cosmetics and customer goods.

vision Be a driving force of innovations, growth and competition and promote sustainability of Latvia, creating products and services with high added value.

mission Develop life science and materials science industries in Latvia and increase competitiveness of the related sectors.

> Represent interests of members in the state and municipal institutions, organisations of entrepreneurs and employees, international organisations and public in general.

Promote competitiveness of the members of Association on the national and international scale, develop business environment driven towards growth and innovations.



goals

Platform - kimiko.lv

kimiko.lv -

place where children can get to know and understand the magical world of chemistry!

Aim of the platform is to promote interests of children, teens and their parents about chemistry, helping parents and teachers introduce children to chemistry in a simple and fun way and demonstrate how exciting and different chemistry can be.

Brochure is developed within the frameworks of the project "Life Science Cluster of Latvia LifeScience.lv" (No. 3.2.1.1/16/A/007) co-funded by the European Regional Development Fund (ERAF).



