Chemical industry ŽUPA JSC Kruševac

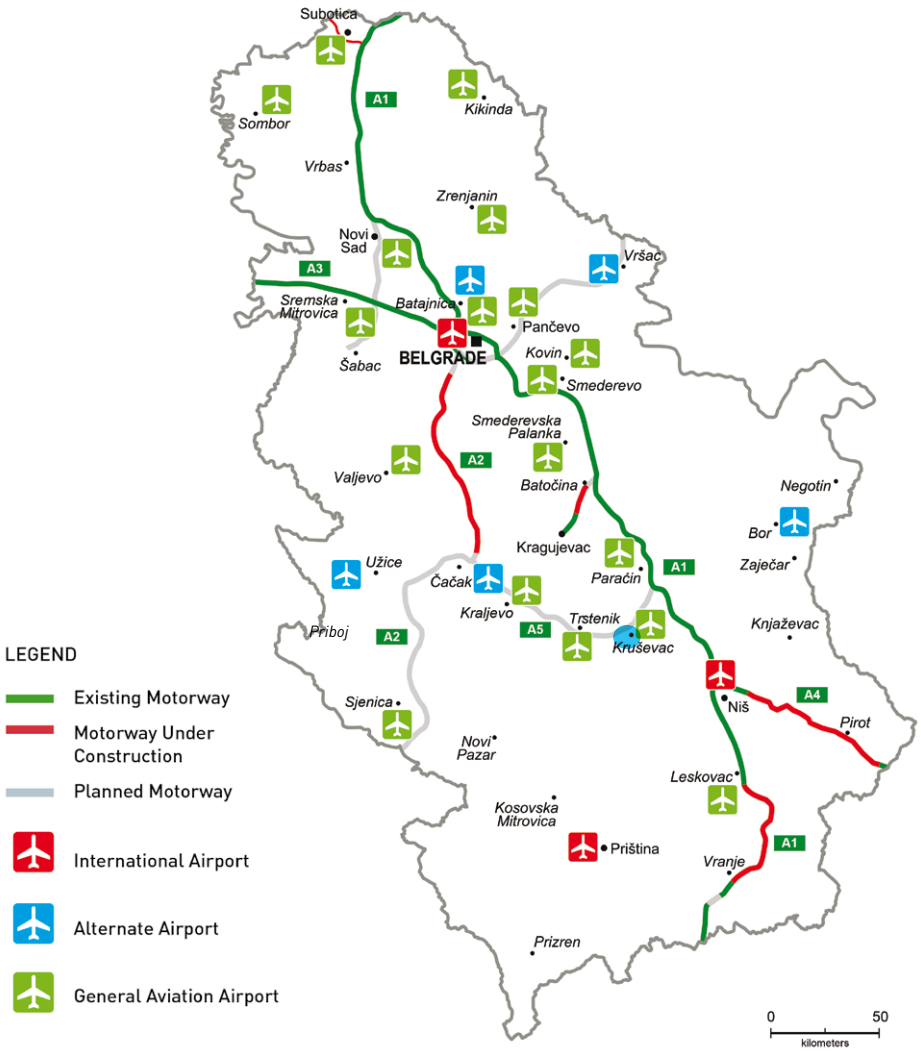
General Information

Full legal name	Chemical industry ŽUPA JSC, Kruševac
Address	No number Sandora Petefija Street, 37000 Krusevac
Identification Number	07194480
Core activity	Manufacture of other inorganic basic chemicals
Foundation Year	1934
Number of Employees	18

Capital structure (in%)

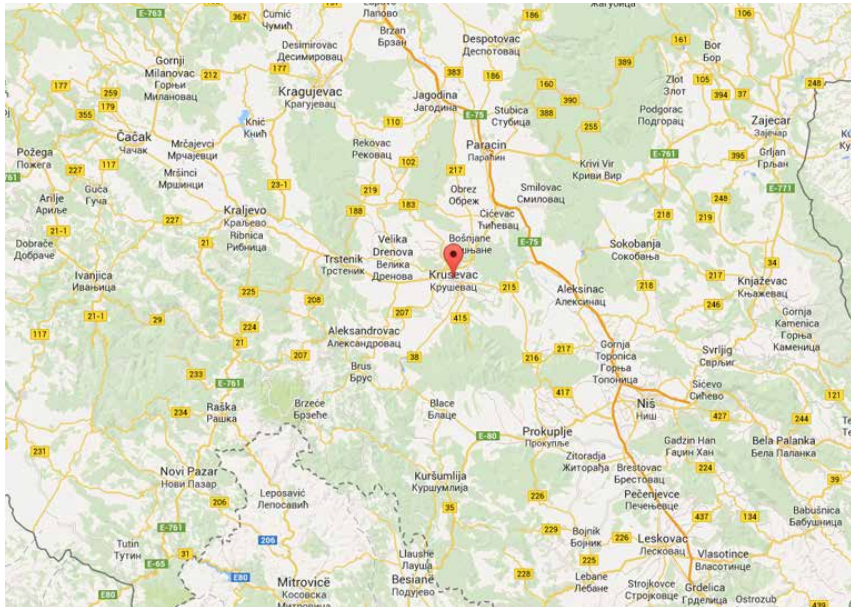
Shareholders' fund	15.38
Privatization Agency	70.00
Others	14.62

General Information



Distance form the Company to:

Belgrade	198 km
Regional Center	0 km
Main road	5 km
Port	199 km
Railway	0 km



Location

Pan-European Transport Corridors

Geografical location of Chemical industry ŽUPA JSC, Kruševac is of strategic importance in the market area of soughteaste Europe and provides oportunity for intensive bussines cooperation.

Long tradition and expertise

Chemical Industry “Župa” ad Kruševac was founded in 1934 by several local industrialists and it originally produced copper-sulphate (blue stone) primarily for vineyard-growing surrounding area called Župa.

The intensive growth has begun after the Second World War and especially during seventies and eighties of 20th century when the production has been significantly modernized and expanded. During those years HI “Župa” is developing into a giant of chemical industry even in global frames.

Since 2004 it is doing business as a stock-holding company, and since November 2005, after the unsuccessful privatization process, the majority package of stocks (70%) is at the Portfolio of the Share Fund of the Republic of Serbia.

“Župa” consists of four production parts: **Sulphates Factory, Pesticides Factory, Flotation reagents Factory and Potassium chemistry Factory.**

Product portfolio

Chemical Industry “Župa” ad Kruševac has a wide range of chemical products, from inorganic salts in the form of sulphates and products of potassium chloride electrolysis (potassium hydroxide and chlorine) through plant protection reagents and reagents for flotation of non-ferrous metal ores to feed additives and leather processing agents. The quality of our products is guaranteed by our long-standing experience (over 73 years of existence).
The quality control is performed from input raw materials to finished products at our own well-equipped laboratories (liquid and gas chromatograph, photometer, granulometer, pH-meters, classic laboratory analyses) according to world recognized methods in cooperation with relevant institutes and faculties.

Production program of Chemical Industry “Župa” ad Kruševac includes the following groups of products:

- INORGANIC SALTS - SULPHATES
- PLANT PROTECTION
- FLOTATION REAGENTS
- ELECTROLYTIC PRODUCTS - KCL
- WATER TREATMENT AGENTS
- FEED ADDITIVES
- LEATHER PROCESSING AGENTS

Product portfolio

NORGANIC SALTS - SULPHATES

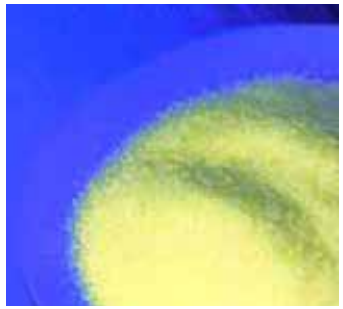
ZINC SULPHATE HEPTAHYDRATE
FORMULA ZnSO4 x 7H2O
QUALITY The content of active ingredient: min 98%; The content of havy metals: max 150ppm (Pb,Cd,As,Hg)
APPEARANCE White crystals

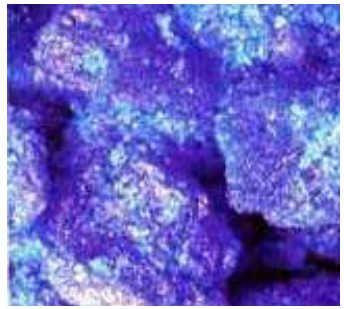
IRON SULPHATE HEPTAHYDRATE
FORMULA FeSO4 x 7H2O
QUALITY The contents of active ingredient: min 98%; The contents of insoluble residue: max 0,2%; The content of free H2SO4: max 0,25%; The content of heavy metals: max 250ppm (Pb,Cd,As,Hg)
APPEARANCE Green to yellow-green crystals

MAGNESIUM SULPHATE HEPTAHYDRATE
FORMULA MgSO4 x 7H2O
QUALITY The contents of active ingredient: min 98%; The contents of heavy metals: max 150ppm (Pb,Cd,As,Hg)
APPEARANCE White small crystals

COPPER SULPHATE (CRYSTALS)
GENERIC NAME Copper sulphate pentahydrate
FORMULA CuSO4 x 5H2O
QUALITY The contents of active ingredient: min 98%; The contents of insoluble residue: max 0,2%; The contents of free H2SO4: max 0,05%; The contents of Fe: max 0,05%; The contents of heavy metals: max 250ppm (Pb,Cd,As,Hg)
APPEARANCE Blue crystals

COPPER SULPHATE (POWDER)
GENERIC NAME Copper sulphate pentahydrate
FORMULA CuSO4 x 5H2O
QUALITY The content of active ingredient: min 98%; The content of insoluble residue: max 0,2%; The content of free H2SO4: max 0,05%; The content of Fe: max 0,05%; The content of heavy metals: max 200ppm (Pb,Cd,As,Hg)
APPEARANCE Blue cristals



Product portfolio

PLANT PROTECTION

BLAUVIT
GENERIC NAME Copper Hydroxide
CHEMICAL COMPOSITION Active ingredient: Copper-hydroxide (IUPAC) copper (II) hydroxide ... 50%±2.5 copper (in the form of copper hydroxide 77%) CAS No: 20427-59-2
PHYSICAL PROPERTIES Formulation form: WP-wettable powder; Colour: Blue; Content of particles larger than 44 microns: Traces; Loss on drying to 105°C: Up to 3%; Emulsion stability in standard hard water after 30 minutes: 80%

BORDEAUX MIXTURE S-20
CHEMICAL COMPOSITION Active ingredient: Copper ... 20+/-6% CAS No: 20427-59-2
PHYSICAL PROPERTIES Formulation form WP - wettable powder; Colour: LIght blue; Content of particles larger than 44 microns: traces; Loss on drying to 105 0C: up to 6%; Suspenzion stability in standard hard water after 30 minutes: 80%; pH of 5% suspenzion: about 7,6

KUPRAGRIN
GENERIC NAME Copper Oxysulphate
CHEMICAL COMPOSITION Active ingredient: Copper - oxysulfate (IUPAC) trihidroxide-sulfate complex CAS No: 20427-59-2; Contens of active ingredient: 350 g/l (±) 5% copperoxysulfate; Molecular formula: 3Cu(OH)2·CuSO4
PHYSICAL PROPERTIES Formulation form: SC-liquid suspension concentrate; Colour: Blueish-green; Content of particles larger than 44 microns: Traces; Suspension stability in standard hard water after 30 minutes: 96%; ph of 0.6% suspension: About 6.7

ZINEB - TECHNICAL CONCENTRATE
CHEMICAL COMPOSITION Active ingredient: ZINEB (IUPAC) zinc-ethylene (dithiocarbamate) CAS No: 12122-67-7; Content of active ingredient: 94% (after Clark); Content of wather: 1% max.; ETU content: 0.1% max.(TLC)
PHYSICAL PROPERTIES Physical state: Powder; Colour: White to light yellow
PACKING PVC or paper bags of 5-25 kg.

ZIRAM - TECHNICAL CONCENTRATE
CHEMICAL COMPOSITION Active ingredient: ZIRAM (IUPAC) zinc bis (dimethylthiocarbamate) CAS No: 137-30-4; Content of active ingredient: 96% min. (after Clark); Content of wather: 1% max.
PHYSICAL PROPERTIES Physical state: Powder; Colour: White (light grey)
PACKING PVC or paper bags of 5 - 15 kg.

TMTD - TECHNICAL CONCENTRATE
CHEMICAL COMPOSITION Active ingredient: TMTD, THURAM (IUPAC) tetramethylthiuram disulphide or bis (dimethylthiocarbamoyl) disulphide
Content of active ingredient 95+/-2% (after clark):
PHYSICAL PROPERTIES Physical state: powder; Colour: White (light gray);
PACKING PVC or paper bags of 5-15 kg

Product portfolio

FLOTATION REAGENTS

SODIUM ETHYL XANTHATE
CONTENTS A.M. Content min. 88-90% as per acetone method
APPEARANCE Light yellow powder or flakes.
PACKING Tin barrels 115, 125kg net.

SODIUM ISOPROPYL XANTHATE
CONTENTS A.M. Content min.85% (flakes); min. 80% (powder or pellets)
APPEARANCE Dry powder, pellets or flakes, light yellow or yellow.
PACKING Tin barrels 120, 130 or 150kg net.

SODIUM ISOBUTYL XANTHATE
CONTENTS A.M. Content min. 88% as per acetone method
APPEARANCE Dry powder or flakes, light jellow or jellow.
PACKING Tin barrels 115, 125kg net.

POTASSIUM ETHYL XANTHATE
CONTENTS A.M. Content min. 90% as per aceton method
APPEARANCE Dry powder, light yellow to yellow colour.
PACKING Tin barrels 120, 130kg net.

POTASSIUM BUTYL XANTHATE
CONTENTS A.M. Content min. 90% as per acetone method
APPEARANCE Dry powder, light yellow or yellow.
PACKING Tin barrels 120 or 130 kg net.

POTASSIUM ISOBUTYL XANTHATE
CONTENTS A.M. Content min. 90% as per aceton method
APPEARANCE Dry powder, light yellow or yellow.
PACKING Tin barrels 120 or 130kg net

POTASSIUM AMYL XANTHATE
CONTENTS A.M. Content min. 90% as per acetone method
APPEARANCE Dry powder or pellets, grey yellow to greenish yellow.
PACKING Tin barrels 130 or 150kg net.

SELKOL 19-81
CONTENTS A.M. Content min. 93%
APPEARANCE Oily light yellow to reddish liquid.
PACKING Sheet iron drums of 200kg net.

ELECTROLYTIC PRODUCT – KCl

POTASSIUM HYDROXIDE FLAKES
FORMULA: KOH
MOL. WEIGHT: 56,11
SPEC. WEIGHT: 2,044
MELTING POINT: 359,8
QUALITY: 90-92% KOH (the remaining is water)
APPERANCE: Milky white flakes of 1 mm and 1cm2size
PACKING: Double PE bags of 25 kg net

POTASSIUM HYDROXIDE LIQUID
LIQUID CHLORINE
COMPOSITION Chlorine (Cl2), min 99,5% vol, Carbon dioxide (CO2) max 0,5% vol, Moisture max 0,05%
PACKING Container, Bottle, Tank

CHLOROHYDRIC ACID (HCL)
COMPOSITION HCL min 31%; Fe max. 0,0001%;
APPEARANCE Clear, light-yellow liwuid, mechanical additives free.
PACKING Tank, Container, Bottle

SODIUM HYPOCHLORITE
COMPOSITION the content of active chlorine (Cl) min 120 gr/l; NaOH min 3 - max 15 gr/l
APPEARANCE clear, yellow-greenish liquid
PACKING In PE carboys of 50 l, in railway and tank trucks.

Product portfolio

WATER TREATMENT AGENTS

KOAFLOK - LIQUID
GENERIC NAME: Base polychlorine of sulphate aluminium
FORMULA: Aln(OH)m(SO4)kCl3 n-m-2k
QUALITY: Al2O3 min 8%, basicity 40-60%, Cl 7±1%, SO42 4±1%, pH 3,0±0,3%, spt 1,2±0,05 gr/cm3
APPEARANCE: Colorless liquid
PACKING: 50kg; tank

LIQUID CHLORINE
COMPOSITION Chlorine (Cl2), min 99,5% vol, Carbon dioxide (CO2) max 0,5% vol, Moisture max 0,05%
PACKING Container, Bottle, Tank

CHLOROHYDRIC ACID (HCL)
COMPOSITION HCL min 31%; Fe max. 0,0001%;
PACKING Tank, Container, Bottle

SODIUM HYPOCHLORITE
COMPOSITION the content of active chlorine (Cl) min 120 gr/l; NaOH min 3 - max 15 gr/l
PACKING In PE carboys of 50 l, in railway and tank trucks.

FEED ADDITIVES

ANI – CU – 25
COMPOSITION Inorganic salt of copper in the form of sulphate.
QUALITY The contents of active ingredient: Cu 24-25%; The contents of insoluble residue: max 2,5% ; The contents of heavy metals: max 100 ppm (Pb, Cd, As, Hg)
APPEARANCE Free-flowing light-blue powder, odourless.
PARTICLE SIZE DISTRIBUTION from 0,3-0,5 mm 10%; from 0,2-0,3 mm 20%; from 0,1-0,2 mm 40%; < 0,1 mm 30%
PACKING Woven PP vent bags with PE inner bag of 25 kg net and BIG BAG, 1.000 kg net.

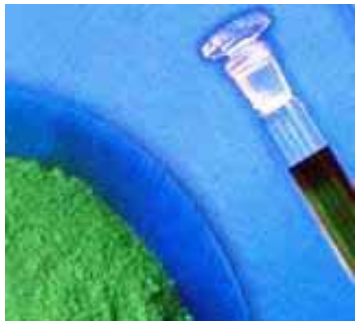
ANI – FE – 20
COMPOSITION Inorganic salts of iron in the form of sulphate.
QUALITY The content of active ingredient: Fe 19-20%; The content of insoluble residue: max 3%; The content of hevy metals: max 100 ppm (Pb, Cd, As, Hg)
APPEARANCE Light green to yellow green powder, odourless.
PARTICLE SIZE DISTRIBUTION >0,5 mm 5%; from 0,2-0,5 mm 40%; from 0,1-0,2 mm 40%; < 0,1 mm 15%
PACKING Woven PP vent bags with PE inner bag of 25 kg net and BIG BAG, 1.000 kg net.

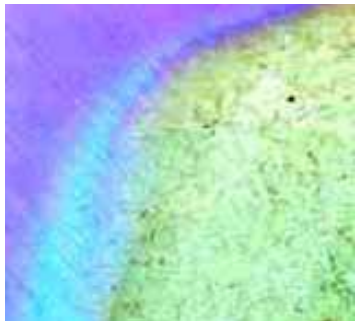
ANI – MG – 10
COMPOSITION Inorganic salt of magnesium in the form of sulphate.
QUALITY The contents of active ingredient: Mg 9-10%; The contents of insoluble residue: max 4%; The content of heavy metal: max 100 ppm (Pb, Cd, As, Hg)
APPEARANCE White powder, odourless.
PARTICLE SIZE DISTRIBUTION >0,5 mm 5% ; from 0,2-0,5 mm 45%; from 0,1-0,2 mm 25%; < 0,1 mm 25%
PACKING Woven PP vent bags with PE inner bag.

ANI – ZN – 22
COMPOSITION Inorganic salt of zinc in the form of sulphate.
QUALITY The contents of active ingredient: Zn 21-22%; The contents of insoluble residue: max 3,5%; The contents of heavy metals: max 100 ppm (Pb, Cd, As, Hg)
APPEARANCE White powder, odourless.
PARTICLE SIZE DISTRIBUTION >0,5 mm 5%; from 0,2-0,5 mm 40%; from 0,1-0,2 mm 40%; < 0,1 mm 15%
PACKING Woven PP vent bags with inner bag.

Product portfolio

LEATHER PROCESSING AGENTS





HROMIBAS - 33
CHEMICAL DATA Hromibas 33 Cr_2O_3 25±1% (powder) 17±1% (liquor); Basicity 33±1% ; Na-sulphate 23-24% (powder); 15-17% (liquor)
APPEARANCE Green powder - green liquid.
PACKING Hromibas 33 powder is packed in double bags, inside PE, outside PP, or in natron bags. Hromibas 33 liquor is transported in adequate tank cars.

ŽUPACHROME CM
CHEMICAL DATA Cr_2O_3 7-8%
APPEARANCE A green - grey powder.
PROPERTY AND APPLICATION Župachrom - CM is reactive chrome tanning agent, an integral part of chrome tanning process with high float exhaustion. It acts as a fixing and self-basifying agent, so that no basifying is necessary and the end pH 3.9-4.1 is obtained.
This material is adapted for the production of all types of chrome leathers. No special preliminary steps is necessary for its application. The tanning has been done in combination with basic chrome sulphate of basicity 33% Sch.

While preparing chrome tanning agent with ŽUPACHROM CM, the product tending ro better level of use, the most important is to determine:
- float quantity
- temperature
- pH value
- chrome oxide quantity

Next condition of work are recommended:
- absolutely delimed andbated leather, pH of leather 7.8 - 8.0
- PHPH - colourless, throught
- 40% water T=26°C-27°C
- 5% NaCl 10'(5-7Bë)
- 0,7% HCOOH (1:5) 15'
- 0,8% H_2SO_4 (1:10) 120'
- pH=2,9-3,1 throught BC=yellow

Tanning:
- 4% BCS 33% Sch 60'
- 2.2% Zupachrom CM 540'
- T=43°C boiling test 98-100°C pH=3.8-4.1

PACKING In double bags, inside PE, outside PP, or in natron bags.

Production and Capacity

Product/services	Unit	Quantity			Value in EUR		
		2011	2012	2012	2011	2012	2013
Product/service	Unit	2011	2012	2013	2011	2012	2013
Sodium hypo-chlorite	t	246	144	82	39.965	21.527	15.021
Chlorine	t	0	0	0			
Powder dithiocarbonate	t	0	5	162		7.000	220.443

Land and buildings

Company is organized in 4 production factories:

- Pesticide factory: production of herbicides, insecticides and fungicides. Currently used for formulation and service packing for liquid pesticides.
- Sulfate factory - production of zinc sulfate, copper sulfate, aluminum sulfate, magnesium sulfate, ferrous sulfate, preparation and premix for fodder. Most recognizable product is “blue stone” - copper sulfate that is the trademark of HI “Župa”, which is currently produced in crystal form
- Flotation agents factory: HI “Župa “ is the only manufacturer of flotation agents in the country. Manufacture of dithiocarbonate (used for separating the tailings from the ore), and that of sodium and potassium, based on the ethyl, isopropyl, isobutyl and amyl alcohol in the form of a powder. It has a plant for pelletizing. The liquid flotation that was produced was SELKOL. Manufacture of dithiocarbonate based on sodium – hydroxide.
- Potassium factory: Production of technical chemicals. Production of potassium or sodium hydroxide in flakes, hydrochloric acid, sodium hypochlorite and chlorine for the purification of drinking water, and potassium carbonate. Currently produces sodium hypochlorite and does distribution of liquid chlorine.

Production and Capacity

Capacity utilization

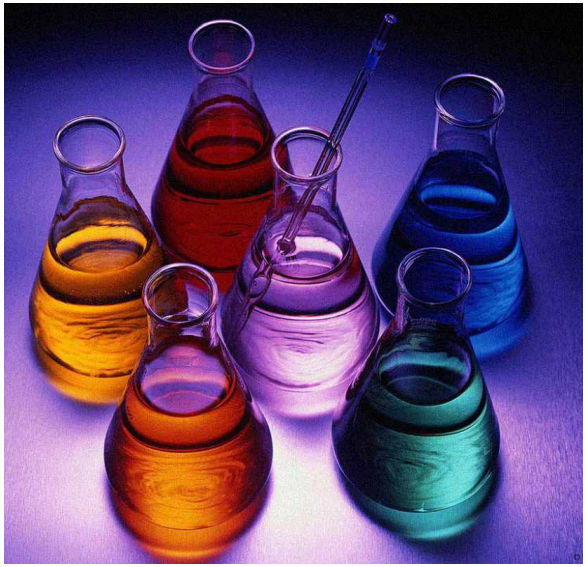
Machine (Production line)	Unit	Installed capacity
Production of copper sulfate	tons/year	6000
Production base chromic sulfate	tons/year	7000
Production of zinc, magnesium sulfate	tons/year	6000
Production of Koaflok	tons/year	480
Production of additives	tons/year	1000
Synthesis of powdered pesticide	tons/year	2000
Pesticide formulations and packaging	tons/year	4000
Formulation of liquid pesticides	tons/year	2000
The production of dithiocarbonate	tons/year	2500
Production of ground soda	tons/year	2000
Production pellet dithiocarbonate	tons/year	3200
Production of powder dithiocarbonate	tons/year	10000
Production of three glycolic acid	tons/year	500
Production of three glycolic acid	tons/year	800
Rectification of alcohol	tons/year	1000
Painting metal barrels	barrel/day	1200
Electrolysis		3500 Cl2, 8000 NaOH, 13000 KOX
Production of hydrochloric acid	tons/year	12000
Production of carbonate	tons/year	4500 - 6000
Evaporation of hydroxide	tons/year	4500 - 6000
Processing of technical water	tons/year	0
System for industrial water	m3/l	216

Capacity usage

Sodium hypo-chlorite – in 2014 until 8/31 128 tons produced (3,6 % capacity usage)

Chlorine – no production activities

Powder dithiocarbonate - in 2014 until 8/31 252 tons produced (2,8 % capacity usage)



Realization

Movement in sale volume

Product/service		Quantity sold			Value in EUR		
	Unit	2011	2012	2013	2011	2012	2013
Sodium hypo chlorite	t	246	144	98	39.965	21.527	18.213
Chlorine	t	0	0	0	0	0	0
Powder dithiocarbonate	t	0	0	167	0	0	227.386

Sales structure

Sales structure in %	2011	2012	2013
Domestic market	100.00	100.00	100.00
Foreign market	0.00	0.00	0.00
TOTAL :	**100.00**	**100.00**	**100.00**

Distribution channels

Distribution channels	% of share
Direct sale	100.00
Wholesale	0.00
Retail	0.00
Intermediaries	0.00

Organization

EMPLOYEES

Number of employees

Working	18
Paid leave	0
Unpaid leave	0
Other (sick leave, vacation, etc.)	0
TOTAL NUMBER OF EMPLOYEES	**18**

Age structure of employees

Age	-25	25-35	35-40	40-45	45-50	50-55	55+
Number	0	9	2	5	1	1	0

Average salaries in EUR

(gross and net) in 2011, 2012 and 2013

Year	Gross	Net
2011	268	172
2012	287	180
2013	322	222

Assets Overview

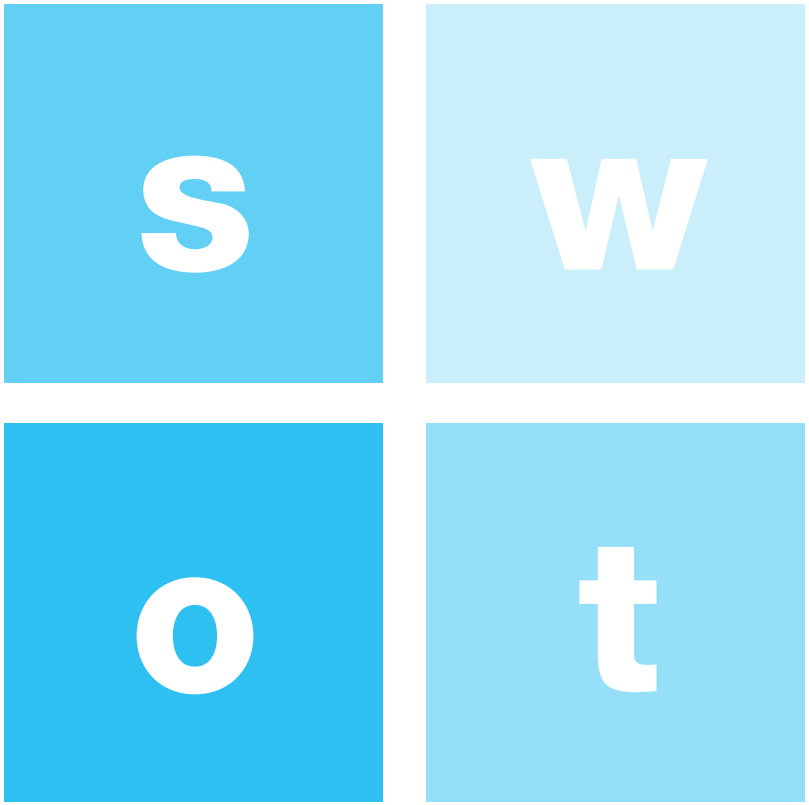
	Value in EUR		
	31/12/2011	31/12/2012	31/12/2013
CURRENT ASSETS	4.843.613	1.129.921	1.119.342
NON-CURRENT ASSETS	5.328.643	9.805.277	20.501.668

A) Information contain in this document is based on the data reciev ed from the company, and as such has not been veryfied by the Privatization Agency. Accordingly, the Privatization Agency shall have no liability with respect to the accuracy and validity of the information contained here in.

B) Pursuant to the law, enterprises from the Republic of Serbia were obliged as of 2004 to prepare Financial Statements in accordance with the International Standards of Financial Reports (ISFR).

SWOT Analysys

STRENGTHS:
Manufactured products and preparations that are used in agriculture, mining, water management and energy industry. Favorable geographical position, close to the major cities. Industrial railway track. Only place to produce certain products (dithiocarbonate) in this part of Europe.

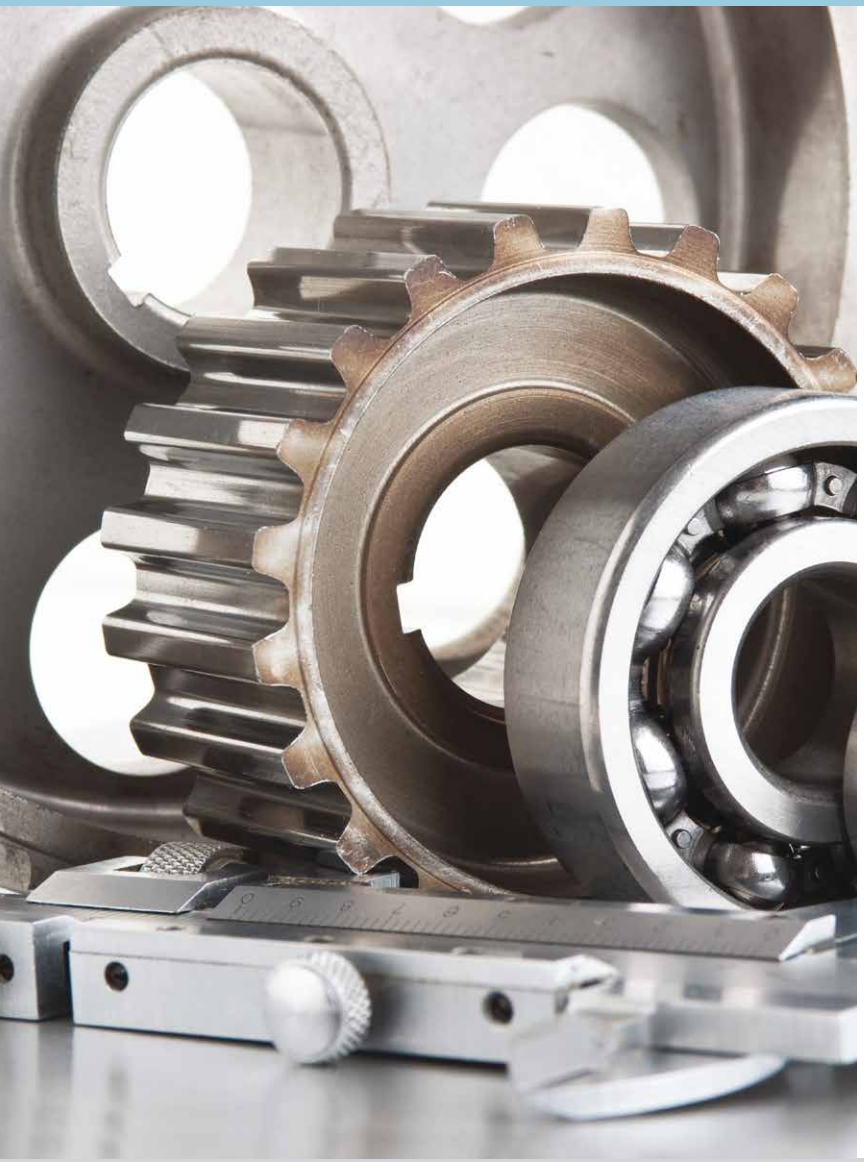


WEAKNESS:
Necessary repairs in certain production parts. Huge production capacities are in low level of exploitation.

OPPORTUNITIES:
Production program of Hi “Župa” JSC is of strategic importance for the Republic of Serbia. Župa can produce and satisfy the needs of both domestic and foreign markets. Proper utilization of production capacity would lead to easy and fast recovery of the factory. Each product is competitive in the market.

THREATS:
Economic and financial crisis, potential instability in the market. Certain products belong to the 2nd, 3rd, 4th group of toxins.

Advantages of Investing in Serbia



Favorable geographic position, owing to which any shipment can reach any location in Europe within 24 hours

Highly educated and cheap labor force

Restructured and stable financial system

Simple procedures for a company start–up and registration

Simple procedures for foreign trade transactions and foreign investments

Several free trade agreements have been signed, ensuring supply of goods to nearly 800 million consumers:

- In March 2012 Serbia was granted the candidates status by the EC
- CEFTA
- Agreement with the EFTA members
- Autonomous trade preferences granted by the EU in December 2000, and implementation of the Interim Trade Agreement with the EU started in February 2010
- Agreement with the Russian Federation, Belarus and Kazakhstan
- Agreement with Turkey

Contact

PRIVATIZATION AGENCY

Republic of Serbia

Ministry of Economy Republic of Serbia
Address: 20, Kneza Milosa Street, 11000 Belgrade, Serbia

www.privreda.gov.rs

Privatization Agency Republic of Serbia
Adress: 23 Terazije, 11000 Belgrade, Serbia
Phone: +381 11 / 3020-800
Fax: +381 11 / 3020-828
Email: info@priv.rs

www.priv.rs